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* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1          Web Page URLs for STN Seminar Schedule - N. America
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 NEWS  5  DEC 18  MARPAT to CA/CAplus accession number crossover limit increased
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 NEWS  7  DEC 27  CA/CAplus enhanced with more pre-1907 records
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 NEWS 20  FEB 26  EMBASE enhanced with Clinical Trial Number field
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 NEWS 23  FEB 26  CAS Registry Number crossover limit increased from 10,000
                  to 300,000 in multiple databases
 NEWS 24  MAR 15  WPIDS/WPIX enhanced with new FRAGHITSTR display format
 NEWS 25  MAR 16  CASREACT coverage extended
 NEWS 26  MAR 20  MARPAT now updated daily

 NEWS EXPRESS  NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
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 NEWS IPC8     For general information regarding STN implementation of IPC 8
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FILE 'HOME' ENTERED AT 12:53:27 ON 21 MAR 2007

=> file uspatful
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

FILE 'USPATFULL' ENTERED AT 12:53:41 ON 21 MAR 2007
CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 20 Mar 2007 (20070320/PD)
FILE LAST UPDATED: 20 Mar 2007 (20070320/ED)
HIGHEST GRANTED PATENT NUMBER: US7194769
HIGHEST APPLICATION PUBLICATION NUMBER: US2007061936
CA INDEXING IS CURRENT THROUGH 20 Mar 2007 (20070320/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 20 Mar 2007 (20070320/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2006
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2006


=> e alizon marc/in
E1            1     ALIZON ETIENNE/IN
E2            1     ALIZON JOSEPH/IN
E3           58 --> ALIZON MARC/IN
E4            1     ALJ TARIK/IN
E5            3     ALJABARI SAMER/IN
E6            1     ALJADAFF DANIEL/IN
E7            8     ALJADEFF DANIEL/IN
```

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E9            1     ALJANEDI MOHDSAMEER Y/IN
E10           1     ALJIZAWI HAKIM MAHMOUD/IN
E11           2     ALJOBURI MARIA/IN
E12           3     ALJOE RONALD R/IN

=> s e3
L1           58 "ALIZON MARC"/IN

=> s l1 and (endogenous/clm)
          5200 ENDOGENOUS/CLM
L2           0 L1 AND (ENDOGENOUS/CLM)

=> s l1 and (reverse transcriptase/clm or RT/clm)
         70832 REVERSE/CLM
          2247 TRANSCRIPTASE/CLM
          2230 REVERSE TRANSCRIPTASE/CLM
                 ((REVERSE(W)TRANSCRIPTASE)/CLM)
          2021 RT/CLM
L3           3 L1 AND (REVERSE TRANSCRIPTASE/CLM OR RT/CLM)

=> d l3,cbib,clm,1-3

L3   ANSWER 1 OF 3  USPATFULL on STN
2003:244249 HIV-2 antigen compositions.
    Montagnier, Luc, Le Plessis Robinson, FRANCE
    Chamaret, Solange, Paris, FRANCE
    Guetard, Denise, Paris, FRANCE
    Alizon, Marc, Paris, FRANCE
    Clavel, Francois, Paris, FRANCE
    Guyader, Mireille, Paris, FRANCE
    Sonigo, Pierre, Paris, FRANCE
    Brun-Vezinet, Francoise, Paris, FRANCE
    Rey, Marianne, Paris, FRANCE
    Rouzioux, Christine, Paris, FRANCE
    Katlama, Christine, Paris, FRANCE
    Institut Pasteur, Paris, FRANCE (non-U.S. corporation)
    US 2003170658 A1 20030911
    APPLICATION: US 2002-180460  A1  20020627 (10)
    PRIORITY: FR 1986-910  19860122
    FR 1986-911  19860122
    FR 1986-1635  19860206
    FR 1986-1985  19860213
    FR 1986-3881  19860318
    FR 1986-4215  19860324
    DOCUMENT TYPE: Utility; APPLICATION.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CLM    What is claimed:
       1. HIV-2 retrovirus or variance of this virus, which retrovirus has
       infectious properties with respect to human T4 lymphocytes and the
       essential morphological and immunological properties of any of the
       retroviruses deposited at the CNCM under n.cndot. I-502, I-532,
       I-642 and I-643:

       2. The purified retrovirus of claim 1 which possesses the following
       properties:  the preferred target for the HIV-2 retrovirus consists of
       human Leu 3 cells (or T4 lymphocytes) and for permanent cell lines
       derived of said T4 lymphocytes;  it is cytotoxic for the human T4
       lymphocytes which it infects;  it has a reverse transcriptase
       activity which requires the presence of Mg2+ ions and has a strong
       affinity for poly adenylate oligodeoxythymidylate (poly(A)-oligo(dT)
       12-18);  it has a density of approximately 1.16 in a sucrose gradient;
       it has a mean diameter of 140 nanometres and a core having mean diameter
       of 41 nanometres;  it can be cultivated in permanent cell lines
       expressing the T4 protein;  it is not infectious in T8 lymphocytes;  the
       lysates of this virus contain p26 protein which does not crossreact
       immunologically with p24 protein of the HTLV-1 virus or of the HTLV-2;
       said lysates further contain p-16 protein which is not recognized
       immunologically by p19 protein of HTLV-1 or of HTLV-2 in
       radioimmunoprecipitation assays;  said lysates further contain an
       envelope glycoprotein having a molecular weight of the order of
       130,000-140,000 which does not crossreact immunologically with gp110 of
       HTLV-1 retrovirus;  said lysates further contain a molecule which can be
       labelled by 35S-cystein, having an apparent molecular weight of
       about 36,000;  the genomic RNA of HIV-2 hybridizes neither with the
       genomic RNA, nor with the ENV gene, nor with the LTRs of HIV-1 under
       stringent conditions;  the genomic RNA of HIV-2 hybridizes weakly under
       non-stringent conditions with nucleotide sequences of the CAG region of
       the HIV-1 genome.

       3. The retrovirus of claim 2 whose lysates also contain a molecule
       having an apparent molecular weight of 42,000-45,000.
```

sequence of its genomic RNA which comprises the R region and the U3 region also comprises a nucleotidic sequence which corresponds with the following nucleotide sequence:

GTGGAAGGCGAGACTGAAAGCAAGAGGAATACCATTTAGTTAAAGGACAG

GAACAGCTATACTTGGTCAGGGCAGGAAGTAACTAACAGAAACAGCTGAG

ACTGCAGGGACTTTCCAGAAGGGGCTGTAACCAAGGGAGGGACATGGGAG

GAGCTGGTGGGGAACGCCTCATATTCTCTGTATAATATACCCGCTGCTTG

CATTGTACTTCAGTCGCTCTGCGGAGAGGCTGGCAGATTGAGCCCTGGAG

GATCTCTCCAGCACTAGACGGATGAGCCTGGGTGCCCTGCTAGACTCTCA

CCAGCACTTGGCCGGTGCTGGCAGACGGCCCCACGCTTGCCTGCTTAAAA

ACCTTCCTTAATAAAGCTGCAGTAGAAGCA

5. The retrovirus of anyone of claims 1 to 4 whose genomic RNA also contains a GAG sequence which corresponds with the following nucleotide sequence:

GAGRODN
ATGGGCGCGAGAAACTCCGTCTTGAGAGGGAAAAAAGCAGATGAA

TTAGAAAGAATCAGGTTACGGCCCGGCGGAAAGAAAAAGTACAGG

CTAAAACATATTGTGTGGGCAGCGAATAAATTGGACAGATTCGGA
100

TTAGCAGAGAGCCTGTTGGAGTCAAAAGAGGGTTGTCAAAAAATT

CTTACAGTTTTAGATCCAATGGTACCGACAGGTTCAGAAAATTTA
200

AAAAGTCTTTTTAATACTGTCTGCGTCATTTGGTGCATACACGCA

GAAGAGAAAGTGAAAGATACTGAAGGAGCAAAACAAATAGTGCGG
300

AGACATCTAGTGGCAGAAACAGGAACTGCAGAGAAAATGCCAAGC

ACAAGTAGACCAACAGCACCATCTAGCGAGAAGGGAGGAAATTAC
400

CCAGTGCAACATGTAGGCGGCAACTACACCCATATACCGCTGAGT

CCCCGAACCCTAAATGCCTGGGTAAAATTAGTAGAGGAAAAAAAG

TTCGGGGCAGAAGTAGTGCCAGGATTTCAGGCACTCTCAGAAGGC
500

TGCACGCCCTATGATATCAACCAAATGCTTAATTGTGTGGGCGAC

CATCAAGCAGCCATGCAGATAATCAGGGAGATTATCAATGAGGAA
600

GCAGCAGAATGGGATGTGCAACATCCAATACCAGGCCCCTTACCA

GCGGGGCAGCTTAGAGAGCCAAGGGGATCTGACATAGCAGGGACA
700

ACAAGCACAGTAGAAGAACAGATCCAGTGGATGTTTAGGCCACAA

AATCCTGTACCAGTAGGAAACATCTATAGAAGATGGATCCAGATA
800

GGATTGCAGAAGTGTGTCAGGATGTACAACCCGACCAACATCCTA

GACATAAAACAGGGACCAAAGGAGCCGTTCCAAAGCTATGTAGAT

AGATTCTACAAAAGCTTGAGGGCAGAACAAACAGATCCAGCAGTG

AAGAATTGGATGACCCAAACACTGCTAGTACAAAATGCCAACCCA

GACTGTAAATTAGTGCTAAAAGGACTAGGGATGAACCCTACCTTA
1000

GAAGAGATGCTGACCGCCTGTCAGGGGGTAGGTGGGCCAGGCCAG

AAAGCTAGATTAATGGCAGAGGCCCTGAAAGAGGTCATAGGACCT
1100

GCCCCTATCCCATTCGCAGCAGCCCAGCAGAGAAAGGCATTTAAA

TGCTGGAACTGTGGAAAGGAAGGGCACTCGGCAAGACAATGCCGA
1200

GCACCTAGAAGGCAGGGCTGCTGGAAGTGTGGTAAGCCAGGACAC

ATCATGACAAACTGCCCAGATAGACAGGCAGGTTTTTTAGGACTG
1300

GGCCCTTGGGGAAAGAAGCCCCGCAACTTCCCCGTGGCCCAAGTT

CCGCAGGGGCTGACACCAACAGCACCCCCAGTGGATCCAGCAGTG

GATCTACTGGAGAAATATATGCAGCAAGGGAAAAGACAGAGAGAG
1400

CAGAGAGAGAGACCATACAAGGAAGTGACAGAGGACTTACTGCAC

CTCGAGCAGGGGGAGACACCATACAGGGAGCCACCAACAGAGGAG
1500

TTGCTGCACCTCAATTCTCTCTTTGGAAAAGACCAG

6. The retrovirus of anyone of claims 1 to 5 whose genomic RNA contains an ENV sequence which corresponds with the following nucleotide sequence:

ENVRN
ATGATGAATCAGCTGCTTATTGCCATTTTATTAGCTAGTGCTTGC

TTAGTATATTGCACCCAATATGTAACTGTTTTCTATGGCGTACCC

ACGTGGAAAAATGCAACCATTCCCCTCTTTTGTGCAACCAGAAAT
100

AGGGATACTTGGGGAACCATACAGTGCTTGCCTGACAATGATGAT

TATCAGGAAATAACTTTGAATGTAACAGAGGCTTTTGATGCATGG
200

AATAATACAGTAACAGAACAAGCAATAGAAGATGTCTGGCATCTA

TTCGAGACATCAATAAAACCATGTGTCAAACTAACACCTTTATGT
300

GTAGCAATGAAATGCAGCAGCACAGAGAGCAGCACAGGGAACAAC

ACAACCTCAAAGAGCACAAGCACAACCACAACCACACCCACAGAC
400

CAGGAGCAAGAGATAAGTGAGGATACTCCATGCGCACGCGCAGAC

AACTGCTCAGGATTGGGAGAGGAAGAAACGATCAATTGCCAGTTC

AATATGACAGGATTAGAAAGAGATAAGAAAAAACAGTATAATGAA
500 . . . .

ACATGGTACTCAAAAGATGTGGTTTGTGAGACAAATAATAGCACA
. . . .

AATCAGACCCAGTGTTACATGAACCATTGCAACACATCAGTCATC
. 600 . . .

ACAGAATCATGTGACAAGCACTATTGGGATGCTATAAGGTTTAGA
. . . .

TACTGTGCACCACCGGGTTATGCCCTATTAAGATGTAATGATACC
. . 700 . .

AATTATTCAGGCTTTGCACCCAACTGTTCTAAAGTAGTAGCTTCT
. . . .

ACATGCACCAGGATGATGGAAACGCAAACTTCCACATGGTTTGGC
. . . 800 .

TTTAATGGCACTAGAGCAGAGAATAGAACATATATCTATTGGCAT
. . . .

GGCAGAGATAATAGAACTATCATCAGCTTAAACAAATATTATAAT
. . . . 900

CTCAGTTTGCATTGTAAGAGGCCAGGGAATAAGACAGTGAAACAA
. . . .

ATAATGCTTATGTCAGGACATGTGTTTCACTCCCACTACCAGCCG
. . . . .

ATCAATAAAAGACCCAGACAAGCATGGTGCTGGTTCAAAGGCAAA
1000 . . .

TGGAAAGACGCCATGCAGGAGGTGAAGACCCTTGCAAAACATCCC
. . . . .

AGGTATAGAGGAACCAATGACACAAGGAATATTAGCTTTGCAGCG
. 1100 . .

CCAGGAAAAGGCTCAGACCCAGAAGTAGCATACATGTGGACTAAC
. . . . .

TGCAGAGGAGAGTTTCTCTACTGCAACATGACTTGGTTCCTCAAT
. . 1200 .

TGGATAGAGAATAAGACACACCGCAATTATGCACCGTGCCATATA
. . . . .

AAGCAAATAATTAACACATGGCATAAGGTAGGGAGAAATGTATAT
. . . 1300

TTGCCTCCCAGGGAAGGGGAGCTGTCCTGCAACTCAACAGTAACC
. . . . .

AGCATAATTGCTAACATTGACTGGCAAAACAATAATCAGACAAAC
. . . .

ATTACCTTTAGTGCAGAGGTGGCAGAACTATACAGATTGGAGTTG
1400 . . . .

GGAGATTATAAATTGGTAGAAATAACACCAATTGGCTTCGCACCT
. . . .

ACAAAAGAAAAAAGATACTCCTCTGCTCACGGGAGACATACAAGA
. 1500 . . .

GGTGTGTTCGTGCTAGGGTTCTTGGGTTTTCTCGCAACAGCAGGT
. . . .

TCTGCAATGGGCGCTCGAGCGTCCCTGACCGTGTCGGCTCAGTCC
. . 1600 . .

CGGACTTTACTGGCCGGGATAGTGCAGCAACAGCAACAGCTGTTG
. . . .

GACGTGGTCAAGAGACAACAAGAACTGTTGCGACTGACCGTCTGG
. . . 1700 .

CTACAGGACCAGGCGCGGCTAAATTCATGGGGATGTGCGTTTAGA
1800

CAAGTCTGCCACACTACTGTACCATGGGTTAATGATTCCTTAGCA

CCTGACTGGGACAATATGACGTGGCAGGAATGGGAAAAACAAGTC

CGCTACCTGGAGGCAAATATCAGTAAAAGTTTAGAACAGGCACAA
1900

ATTCAGCAAGAGAAAAATATGTATGAACTACAAAAATTAAATAGC

TGGGATATTTTTGGCAATTGGTTTGACTTAACCTCCTGGGTCAAG
2000

TATATTCAATATGGAGTGCTTATAATAGTAGCAGTAATAGCTTTA

AGAATAGTGATATATGTAGTACAAATGTTAAGTAGGCTTAGAAAG
2100

GGCTATAGGCCTGTTTTCTCTTCCCCCCCCGGTTATATCCAACAG

ATCCATATCCACAAGGACCGGGGACAGCCAGCCAACGAAGAAACA
2200

GAAGAAGACGGTGGAAGCAACGGTGGAGACAGATACTGGCCCTGG

GCGATAGCATATATACATTTCCTGATCCGCCAGCTGATTCGCCTC

TTGACCAGACTATACAGCATCTGCAGGGACTTACTATCCAGGAGC
2300

TTCCTGACCCTCCAACTCATCTACCAGAATCTCAGAGACTGGCTG

AGACTTAGAACAGCCTTCTTGCAATATGGGTGCGAGTGGATCCAA
2400

GAAGCATTCCAGGCCGCCGCGAGGGCTACAAGAGAGACTCTTGCG

GGCGCGTGCAGGGGCTTGTGGAGGGTATTGGAACGAATCGGGAGG
2500

GGAATACTCGCGGTTCCAAGAAGGATCAGACAGGGAGCAGAAATC

GCCCTCCTGTGAGGGACGGCAGTATCAGCAGGGAGACTTTATGAA
2600

TACTCCATGGAAGGACCCAGCAGCAGAAAGGGAGAAAAATTTGTA

CAGGCAACAAAATATGGA

7. The retrovirus of anyone of claims 1 to 6 whose RNA virtually hybridizes neither with the ENV gene and the LTR close to it, particularly with the nucleotide sequence 5290-9130 of HIV-1, nor with the sequences of the POL region of the HIV-1 genome, particularly with the nucleotide sequence 2170-2240 of HIV-1.

8. A composition comprising at least one antigen, particularly a protein or glycoprotein of HIV-2 virus according to anyone of claims 1 to 7.

9. The composition of claim 8 which consists of total extract or lysate of said retrovirus.

10. The composition of claim 8 wherein said antigen consists of at least one of the internal core proteins of said virus, particularly p12, p16 and p26, which have apparent molecular weight of the order of 12,000, 16,000 and 26,000.

11. The composition of claim 8, characterized in that it contains a

130,000-140,000.

12. An antigen which provides a single bound in electrophoresis on a polyacrylamid gel which comprises, in common with one of the purified antigens of HIV-2 retrovirus, an epitope that is recognized by the serum of a carrier of antibody against HIV-2.

13. A purified antigen having the immunological characteristics of one of the following proteins or glycoproteins of HIV-2: p12, p16, p26, p36, p42 and gp140.

14. An antigen of claim 13 which has the following aminoacid sequence or a part of said sequence recognized by anti-p12 antibodies:

```
                                ArgLysAlaPheLys
                                     .         .

    CysTrpAsnCysGlyLysGluGlyHisSerAlaArgGlnCysArg
             .         .      1200         .

    AlaProArgArgGlnGlyCysTrpLysCysGlyLysProGlyHis
        .         .         .         .         .

    IleMetThrAsnCysProAspArgGlnAlaGlyPheLeuGlyLeu
             .         .         .      1300

    GlyProTrpGlyLysLysProArgAsnPheProValAlaGlnVal
        .         .         .         .         .

    ProGlnGlyLeuThrProThrAlaProProValAspProAlaVal
             .         .         .         .

    AspLeuLeuGluLysTyrMetGlnGlnGlyLysArgGlnArgGlu
     1400         .         .         .         .

    GlnArgGluArgProTyrLysGluValThrGluAspLeuLeuHis
             .         .         .         .

    LeuGluGlnGlyGluThrProTyrArgGluProProThrGluAsp
        .      1500         .         .         .

    LeuLeuHisLeuAsnSerLeuPheGlyLysAspGln
             .         .         .
```

15. An antigen of claim 13 which has the following aminoacid sequence or a part of said sequence recognized by anti-p16 antibodies:

```
    MetGlyAlaArgAsnSerValLeuArgGlyLysLysAlaAspGlu
             .         .         .         .

    LeuGluArgIleArgLeuArgProGlyGlyLysLysLysTyrArg
        .         .         .         .         .

    LeuLysHisIleValTrpAlaAlaAsnLysLeuAspArgPheGly
           100         .         .         .

    LeuAlaGluSerLeuLeuGluSerLysGluGlyCysGlnLysIle
        .         .         .         .         .

    LeuThrValLeuAspProMetValProThrGlySerGluAsnLeu
             .       200         .         .

    LysSerLeuPheAsnThrValCysValIleTrpCysIleHisAla
        .         .         .         .         .

    GluGluLysValLysAspThrGluGlyAlaLysGlnIleValArg
             .         .       300         .

    ArgHisLeuValAlaGluThrGlyThrAlaGluLysMetProSer
        .         .         .         .         .

    ThrSerArgProThrAlaProSerSerGluLysGlyGlyAsnTyr
             .         .         .       400
```

16. An antigen of claim 13 which has the following aminoacid sequence or a part of said sequence recognized by anti-p26 antibodies:

```
    ProValGlnHisValGlyGlyAsnTyrThrHisIleProLeuSer
        .         .         .         .         .

    ProArgThrLeuAsnAlaTrpValLysLeuValGluGluLysLys
             .         .         .         .
```

PheGlyAlaGluValValProGlyPheGlnAlaLeuSerGluGly
500

CysThrProTyrAspIleAsnGlnMetLeuAsnCysValGlyAsp

HisGlnAlaAlaMetGlnIleIleArgGluIleIleAsnGluGlu
600

AlaAlaGluTrpAspValGlnHisProIleProGlyProLeuPro

AlaGlyGlnLeuArgGluProArgGlySerAspIleAlaGlyThr
700

ThrSerThrValGluGluGlnIleGlnTrpMetPheArgProGln

AsnProValProValGlyAsnIleTyrArgArgTrpIleGlnIle
800

GlyLeuGlnLysCysValArgMetTyrAsnProThrAsnIleLeu

AspIleLysGlnGlyProLysGluProPheGlnSerTyrValAsp
900

ArgPheTyrLysSerLeuArgAlaGluGlnThrAspProAlaVal

LysAsnTrpMetThrGlnThrLeuLeuValGlnAsnAlaAsnPro

AspCysLysLeuValLeuLysGlyLeuGlyMetAsnProThrLeu
1000

GluGluMetLeuThrAlaCysGlnGlyValGlyGlyProGlyGln

LysAlaArgLeuMetAlaGluAlaLeuLysGluValIleGlyPro
1100

AlaProIleProPheAlaAlaAlaGlnGln

17. An antigen of claim 13 which has the following aminoacid sequence or a part of said sequence recognized by anti-gp140 antibodies:

ENVRN
MetMetAsnGlnLeuLeuIleAlaIleLeuLeuAlaSerAlaCys

LeuValTyrCysThrGlnTyrValThrValPheTyrGlyValPro

ThrTrpLysAsnAlaThrIleProLeuPheCysAlaThrArgAsn
100

ArgAspThrTrpGlyThrIleGlnCysLeuProAspAsnAspAsp

TyrGlnGluIleThrLeuAsnValThrGluAlaPheAspAlaTrp
200

AsnAsnThrValThrGluGlnAlaIleGluAspValTrpHisLeu

PheGluThrSerIleLysProCysValLysLeuThrProLeuCys
300

ValAlaMetLysCysSerSerThrGluSerSerThrGlyAsnAsn

ThrThrSerLysSerThrSerThrThrThrThrThrProThrAsp
400

GlnGluGlnGluIleSerGluAspThrProCysAlaArgAlaAsp

AsnCysSerGlyLeuGlyGluGluGluThrIleAsnCysGlnPhe

AsnMetThrGlyLeuGluArgAspLysLysLysGlnTyrAsnGlu
500

```
ThrTrpTyrSerLysAspValValCysGluThrAsnAsnSerThr
      .         .         .         .

AsnGlnThrGlnCysTyrMetAsnHisCysAsnThrSerValIle
    .       600         .         .         .

ThrGluSerCysAspLysHisTyrTrpAspAlaIleArgPheArg
        .         .         .         .

TyrCysAlaProProGlyTyrAlaLeuLeuArgCysAsnAspThr
    .         .       700         .         .

AsnTyrSerGlyPheAlaProAsnCysSerLysValValAlaSer
        .         .         .         .

ThrCysThrArgMetMetGluThrGlnThrSerThrTrpPheGly
    .         .         .       800         .

PheAsnGlyThrArgAlaGluAsnArgThrTyrIleTyrTrpHis
        .         .         .         .

GlyArgAspAsnArgThrIleIleSerLeuAsnLysTyrTyrAsn
    .         .         .         .       900

LeuSerLeuHisCysLysArgProGlyAsnLysThrValLysGln
        .         .         .         .

IleMetLeuMetSerGlyHisValPheHisSerHisTyrGlnPro
    .         .         .         .         .

IleAsnLysArgProArgGlnAlaTrpCysTrpPheLysGlyLys
      1000        .         .         .

TrpLysAspAlaMetGlnGluValLysThrLeuAlaLysHisPro
    .         .         .         .         .

ArgTyrArgGlyThrAsnAspThrArgAsnIleSerPheAlaAla
          .      1100         .         .

ProGlyLysGlySerAspProGluValAlaTyrMetTrpThrAsn
    .         .         .         .         .

CysArgGlyGluPheLeuTyrCysAsnMetThrTrpPheLeuAsn
          .         .      1200         .

TrpIleGluAsnLysThrHisArgAsnTyrAlaProCysHisIle
    .         .         .         .         .

LysGlnIleIleAsnThrTrpHisLysValGlyArgAsnValTyr
          .         .         .      1300

LeuProProArgGluGlyGluLeuSerCysAsnSerThrValThr
    .         .         .         .         .

SerIleIleAlaAsnIleAspTrpGlnAsnAsnAsnGlnThrAsn
        .         .         .         .

IleThrPheSerAlaGluValAlaGluLeuTyrArgLeuGluLeu
 1400       .         .         .         .

GlyAspTyrLysLeuValGluIleThrProIleGlyPheAlaPro

ThrLysGluLysArgTyrSerSerAlaHisGlyArgHisThrArg
    .      1500         .         .         .

GlyValPheValLeuGlyPheLeuGlyPheLeuAlaThrAlaGly
        .         .         .         .

SerAlaMetGlyAlaArgAlaSerLeuThrValSerAlaGlnSer
    .         .      1600         .         .

ArgThrLeuLeuAlaGlyIleValGlnGlnGlnGlnGlnLeuLeu
        .         .         .         .

AspValValLysArgGlnGlnGluLeuLeuArgLeuThrValTrp
    .         .         .      1700         .

GlyThrLysAsnLeuGlnAlaArgValThrAlaIleGluLysTyr
                  .         .         .

LeuGlnAspGlnAlaArgLeuAsnSerTrpGlyCysAlaPheArg
    .         .         .         .      1800
```

GlnValCysHisThrThrValProTrpValAsnAspSerLeuAla

ProAspTrpAspAsnMetThrTrpGlnGluTrpGluLysGlnVal

ArgTyrLeuGluAlaAsnIleSerLysSerLeuGluGlnAlaGln
1900

IleGlnGlnGluLysAsnMetTyrGluLeuGlnLysLeuAsnSer

TrpAspIlePheGlyAsnTrpPheAspLeuThrSerTrpValLys
2000

TyrIleGlnTyrGlyValLeuIleIleValAlaValIleAlaLeu

ArgIleValIleTyrValValGlnMetLeuSerArgLeuArgLys
2100

GlyTyrArgProValPheSerSerProProGlyTyrIleGlnGln

IleHisIleHisLysAspArgGlyGlnProAlaAsnGluGluThr
2200

GluGluAspGlyGlySerAsnGlyGlyAspArgTyrTrpProTrp

ProIleAlaTyrIleHisPheLeuIleArgGlnLeuIleArgLeu

LeuThrArgLeuTyrSerIleCysArgAspLeuLeuSerArgSer
2300

PheLeuThrLeuGlnLeuIleTyrGlnAsnLeuArgAspTrpLeu

ArgLeuArgThrAlaPheLeuGlnTyrGlyCysGluTrpIleGln
2400

GluAlaPheGlnAlaAlaAlaArgAlaThrArgGluThrLeuAla

GlyAlaCysArgGlyLeuTrpArgValLeuGluArgIleGlyArg
2500

GlyIleLeuAlaValProArgArgIleArgGlnGlyAlaGluIle

AlaLeuLeu***GlyThrAlaValSerAlaGlyArgLeuTyrGlu
2600

TyrSerMetGluGlyProSerSerArgLysGlyGluLysPheVal

GlnAlaThrLysTyrGly

18. A method for the in vitro detection of the presence of antibodies against anti-HIV-2 in a biological liquid, such as a serum, more particularly for the in vitro diagnosis of a potential or existing LAS or AIDS caused by HIV-2 type retrovirus, which comprises contacting a serum or other biological medium from the person to be diagnosed with a composition according to anyone of claims 8 to 11 or with an antigen according to anyone of claims 12 to 17, detecting the immunological conjuguate possibly formed between said anti-HIV-2-antibodies and the antigen or antigens used.

19. The method of claim 18 which comprises achieving the detection of said immunological conjuguate by reacting said immunological conjuguate possibly formed with a labelled reagent formed either by human anti-immunoglobulin-antibodies or of a bacterial A protein, and by detecting the complexe formed between the reagent and said immunological conjuguate.

20. Kit for the detection of anti-HIV-2-antibodies in a biological fluid, particularly of a person possibly carrying such antibodies, which comprises: a composition such as defined in anyone of claims 8 to 11 or an antigen such as defined in any of claims 12 to 17; and means for detecting the immunological complexe resulting from the immunological reaction between the antigen and said biological fluid.

21. The kit of claim 21, whose means for detecting the immunological complexe formed comprises human anti-immunoglobulins or a protein A and a means for detecting the complexe formed between the anti-HIV-2 antibodies contained in the detected immunological conjuguate.

22. Immunogenic compositions containing an envelope glycoprotein of HIV-2 retrovirus, such as gp140 of said retrovirus, or part of said glycoprotein, in association with a pharmaceutically acceptable vehicle appropriate for the constitution of vaccines effective against HIV-2.

23. The composition of claim 22 which contains at least part of an immunogenic glycoprotein comprising the proteic backbone having the following sequence:

ENVRN
MetMetAsnGlnLeuLeuIleAlaIleLeuLeuAlaSerAlaCys

LeuValTyrCysThrGlnTyrValThrValPheTyrGlyValPro

ThrTrpLysAsnAlaThrIleProLeuPheCysAlaThrArgAsn

ArgAspThrTrpGlyThrIleGlnCysLeuProAspAsnAspAsp

TyrGlnGluIleThrLeuAsnValThrGluAlaPheAspAlaTrp

AsnAsnThrValThrGluGlnAlaIleGluAspValTrpHisLeu

PheGluThrSerIleLysProCysValLysLeuThrProLeuCys

ValAlaMetLysCysSerSerThrGluSerSerThrGlyAsnAsn

ThrThrSerLysSerThrSerThrThrThrThrProThrAsp

GlnGluGlnGluIleSerGluAspThrProCysAlaArgAlaAsp

AsnCysSerGlyLeuGlyGluGluGluThrIleAsnCysGlnPhe

AsnMetThrGlyLeuGluArgAspLysLysLysGlnTyrAsnGlu

ThrTrpTyrSerLysAspValValCysGluThrAsnAsnSerThr

AsnGlnThrGlnCysTyrMetAsnHisCysAsnThrSerValIle

ThrGluSerCysAspLysHisTyrTrpAspAlaIleArgPheArg

TyrCysAlaProProGlyTyrAlaLeuLeuArgCysAsnAspThr

AsnTyrSerGlyPheAlaProAsnCysSerLysValValAlaSer

ThrCysThrArgMetMetGluThrGlnThrSerThrTrpPheGly

PheAsnGlyThrArgAlaGluAsnArgThrTyrIleTyrTrpHis

GlyArgAspAsnArgThrIleIleSerLeuAsnLysTyrTyrAsn

LeuSerLeuHisCysLysArgProGlyAsnLysThrValLysGln

IleMetLeuMetSerGlyHisValPheHisSerHisTyrGlnPro

IleAsnLysArgProArgGlnAlaTrpCysTrpPheLysGlyLys

TrpLysAspAlaMetGlnGluValLysThrLeuAlaLysHisPro

ArgTyrArgGlyThrAsnAspThrArgAsnIleSerPheAlaAla
1100

ProGlyLysGlySerAspProGluValAlaTyrMetTrpThrAsn

CysArgGlyGluPheLeuTyrCysAsnMetThrTrpPheLeuAsn
1200

TrpIleGluAsnLysThrHisArgAsnTyrAlaProCysHisIle

LysGlnIleIleAsnThrTrpHisLysValGlyArgAsnValTyr
1300

LeuProProArgGluGlyGluLeuSerCysAsnSerThrValThr

SerIleIleAlaAsnIleAspTrpGlnAsnAsnAsnGlnThrAsn

IleThrPheSerAlaGluValAlaGluLeuTyrArgLeuGluLeu
1400

GlyAspTyrLysLeuValGluIleThrProIleGlyPheAlaPro

ThrLysGluLysArgTyrSerSerAlaHisGlyArgHisThrArg
1500

GlyValPheValLeuGlyPheLeuGlyPheLeuAlaThrAlaGly

SerAlaMetGlyAlaArgAlaSerLeuThrValSerAlaGlnSer
1600

ArgThrLeuLeuAlaGlyIleValGlnGlnGlnGlnGlnLeuLeu

AspValValLysArgGlnGlnGluLeuLeuArgLeuThrValTrp
1700

GlyThrLysAsnLeuGlnAlaArgValThrAlaIleGluLysTyr

LeuGlnAspGlnAlaArgLeuAsnSerTrpGlyCysAlaPheArg
1800

GlnValCysHisThrThrValProTrpValAsnAspSerLeuAla

ProAspTrpAspAsnMetThrTrpGlnGluTrpGluLysGlnVal

ArgTyrLeuGluAlaAsnIleSerLysSerLeuGluGlnAlaGln
1900

IleGlnGlnGluLysAsnMetTyrGluLeuGlnLysLeuAsnSer

TrpAspIlePheGlyAsnTrpPheAspLeuThrSerTrpValLys
2000

TyrIleGlnTyrGlyValLeuIleIleValAlaValIleAlaLeu

ArgIleValIleTyrValValGlnMetLeuSerArgLeuArgLys
2100

GlyTyrArgProValPheSerSerProProGlyTyrIleGlnGln

IleHisIleHisLysAspArgGlyGlnProAlaAsnGluGluThr
2200

GluGluAspGlyGlySerAsnGlyGlyAspArgTyrTrpProTrp

ProIleAlaTyrIleHisPheLeuIleArgGlnLeuIleArgLeu

LeuThrArgLeuTyrSerIleCysArgAspLeuLeuSerArgSer
2300 . . . .

PheLeuThrLeuGlnLeuIleTyrGlnAsnLeuArgAspTrpLeu
. . . .

ArgLeuArgThrAlaPheLeuGlnTyrGlyCysGluTrpIleGln
. 2400 . . .

GluAlaPheGlnAlaAlaAlaArgAlaThrArgGluThrLeuAla
. . . .

GlyAlaCysArgGlyLeuTrpArgValLeuGluArgIleGlyArg
. . 2500 . .

GlyIleLeuAlaValProArgArgIleArgGlnGlyAlaGluIle
. . . .

AlaLeuLeu***GlyThrAlaValSerAlaGlyArgLeuTyrGlu
. . . 2600 .

TyrSerMetGluGlyProSerSerArgLysGlyGluLysPheVal
. . . .

GlnAlaThrLysTyrGly
. .

24. The immunogenic composition of claim 22 or of claim 23 which is dosed in antigen in order to enable the administration of a dosage-unit of 10 to 500, particularly from 50 to 100 µg/kg of bodyweight.

25. Monoclonal antibody characterized by its ability to specifically recognize one of the antigens according to anyone of claims 14 to 17.

26. The secreting hybridomas of the monoclonal antibody of claim 25.

27. Nucleic acids, optionally labelled, derived of part at least of RNA of HIV-2 virus or of one of its variance.

28. The nucleic acid of claim 27, which contains at least part of the cDNA which corresponds with the entire genomic RNA of HIV-2 retrovirus.

29. The nucleic acid of claim 27, which contains the nucleotide sequence:

GTGGAAGGCGAGACTGAAAGCAAGAGGAATACCATTTAGTTAAAGGACAG

GAACAGCTATACTTGGTCAGGGCAGGAAGTAACTAACAGAAACAGCTGAG

ACTGCAGGGACTTTCCAGAAGGGGCTGTAACCAAGGGAGGGACATGGGAG

GAGCTGGTGGGGAACGCCTCATATTCTCTGTATAATATACCCGCTGCTTG

CATTGTACTTCAGTCGCTCTGCGGAGAGGCTGGCAGATTGAGCCCTGGAG

GATCTCTCCAGCACTAGACGGATGAGCCTGGGTGCCCTGCTAGACTCTCA

CCAGCACTTGGCCGGTGCTGGCAGACGGCCCCACGCTTGCCTGCTTAAAA

ACCTTCCTTAATAAAGCTGCAGTAGAAGCA

30. The nucleic acid of claim 27, which contains a nucleotidic sequence coding for at least part of the aminoacid sequence indicated hereafter:

GAGRODN
MetGlyAlaArgAsnSerValLeuArgGlyLysLysAlaAspGlu

.multidot. .multidot. .multidot.
.multidot.
LeuGluArgIleArgLeuArgProGlyGlyLysLysLysTyrArg

.multidot. .multidot. .multidot.
.multidot. .multidot.
LeuLysHisIleValTrpAlaAlaAsnLysLeuAspArgPheGly

100 .multidot. .multidot. .multidot.
LeuAlaGluSerLeuLeuGluSerLysGluGlyCysGlnLysIle

.multidot. .multidot. .multidot.
.multidot. .multidot.
LeuThrValLeuAspProMetValProThrGlySerGluAsnLeu

```
    LysSerLeuPheAsnThrValCysValIleTrpCysIleHisAla

        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    GluGluLysValLysAspThrGluGlyAlaLysGlnIleValArg

              .multidot.          .multidot.       300          .multidot.
    ArgHisLeuValAlaGluThrGlyThrAlaGluLysNetProSer

        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    ThrSerArgProThrAlaProSerSerGluLysGlyGlyAsnTyr

              .multidot.          .multidot.          .multidot.       400
    ProValGlnHisValGlyGlyAsnTyrThrHisIleProLeuSer

        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    ProArgThrLeuAsnAlaTrpValLysLeuValGluGluLysLys

              .multidot.          .multidot.          .multidot.
.multidot.
    PheGlyAlaGluValValProGlyPheGlnAlaLeuSerGluGly

      500          .multidot.          .multidot.          .multidot.
.multidot.
    CysThrProTyrAspIleAsnGlnMetLeuAsnCysValGlyAsp

              .multidot.          .multidot.          .multidot.
.multidot.
    HisGlnAlaAlaMetGlnIleIleArgGluIleIleAsnGluGlu

        .multidot.       600          .multidot.          .multidot.
.multidot.
    AlaAlaGluTrpAspValGlnHisProIleProGlyProLeuPro

              .multidot.          .multidot.          .multidot.
.multidot.
    AlaGlyGlnLeuArgGluProArgGlySerAspIleAlaGlyThr

        .multidot.          .multidot.       700          .multidot.
.multidot.
    ThrSerThrValGluGluGlnIleGlnTrpMetPheArgProGln

    AsnProValProValGlyAsnIleTyrArgArgTrpIleGlnIle

        .multidot.          .multidot.          .multidot.       800
.multidot.
    GlyLeuGlnLysCysValArgMetTyrAsnProThrAsnIleLeu

              .multidot.          .multidot.          .multidot.
.multidot.
    AspIleLysGlnGlyProLysGluProPheGlnSerTyrValAsp

        .multidot.          .multidot.          .multidot.
.multidot.       900
    ArgPheTyrLysSerLeuArgAlaGluGlnThrAspProAlaVal

              .multidot.          .multidot.          .multidot.
.multidot.
    LysAsnTrpMetThrGlnThrLeuLeuValGlnAsnAlaAsnPro

        .multidot.          .multidot.          .multidot.
.multidot.
    AspCysLysLeuValLeuLysGlyLeuGlyMetAsnProThrLeu

       1000          .multidot.          .multidot.          .multidot.
    GluGluMetLeuThrAlaCysGlnGlyValGlyGlyProGlyGln

        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    LysAlaArgLeuMetAlaGluAlaLeuLysGluValIleGlyPro

              .multidot.       1100          .multidot.          .multidot.
    AlaProIleProPheAlaAlaAlaGlnGlnArgLysAlaPheLys

        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    CysTrpAsnCysGlyLysGluGlyHisSerAlaArgGlnCysArg

              .multidot.          .multidot.       1200          .multidot.
    AlaProArgArgGlnGlyCysTrpLysCysGlyLysProGlyHis
```

```
        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    IleMetThrAsnCysProAspArgGlnAlaGlyPheLeuGlyLeu

             .multidot.          .multidot.          .multidot.       1300
    GlyProTrpGlyLysLysProArgAsnPheProValAlaGlnVal

        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    ProGlnGlyLeuThrProThrAlaProProValAspProAlaVal

             .multidot.          .multidot.          .multidot.
.multidot.
    AspLeuLeuGluLysTyrMetGlnGlnGlyLysArgGlnArgGlu

     1400          .multidot.          .multidot.          .multidot.
.multidot.
    GlnArgGluArgProTyrLysGluValThrGluAspLeuLeuHis

             .multidot.          .multidot.          .multidot.
.multidot.
    LeuGluGlnGlyGluThrProTyrArgGluProProThrGluAsp

        .multidot.      1500          .multidot.          .multidot.
    LeuLeuHisLeuAsnSerLeuPheGlyLysAspGln

             .multidot.          .multidot.          .multidot.
```

31. The nucleic acid of claim 27, which contains a nucleotidic sequence coding for at least part of the aminoacid sequence indicated hereafter:

```
                                |ArgLysAlaPheLys
                                |
                                |    .multidot.          .multidot.
    CysTrpAsnCysGlyLysGluGlyHisSerAlaArgGlnCysArg

             .multidot.          .multidot.      1200          .multidot.
    AlaProArgArgGlnGlyCysTrpLysCysGlyLysProGlyHis

        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    IleMetThrAsnCysProAspArgGlnAlaGlyPheLeuGlyLeu

             .multidot.          .multidot.          .multidot.       1300
    GlyProTrpGlyLysLysProArgAsnPheProValAlaGlnVal

        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    ProGlnGlyLeuThrProThrAlaProProValAspProAlaVal

             .multidot.          .multidot.          .multidot.
.multidot.
    AspLeuLeuGluLysTyrMetGlnGlnGlyLysArgGlnArgGlu

     1400          .multidot.          .multidot.          .multidot.
.multidot.
    GlnArgGluArgProTyrLysGluValThrGluAspLeuLeuHis

             .multidot.          .multidot.          .multidot.
.multidot.
    LeuGluGlnGlyGluThrProTyrArgGluProProThrGluAsp

        .multidot.      1500          .multidot.          .multidot.
.multidot.
    LeuLeuHisLeuAsnSerLeuPheGlyLysAspGln
```

32. The nucleic acid of claim 27, which contains a nucleotidic sequence coding for at least part of the aminoacid sequence indicated hereafter:

```
    MetGlyAlaArgAsnSerValLeuArgGlyLysLysAlaAspGlu

             .multidot.          .multidot.          .multidot.
.multidot.
    LeuGluArgIleArgLeuArgProGlyGlyLysLysLysTyrArg

        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    LeuLysHisIleValTrpAlaAlaAsnLysLeuAspArgPheGly

           100          .multidot.          .multidot.          .multidot.
    LeuAlaGluSerLeuLeuGluSerLysGluGlyCysGlnLysIle
```

.multidot. .multidot.
LeuThrValLeuAspProNetValProThrGlySerGluAsnLeu

.multidot. 200 .multidot. .multidot.
LysSerLeuPheAsnThrValCysValIleTrpCysIleHisAla

.multidot. .multidot. .multidot.
.multidot. .multidot.
GluGluLysValLysAspThrGluGlyAlaLysGlnIleValArg

.multidot. .multidot. 300 .multidot.
ArgHisLeuValAlaGluThrGlyThrAlaGluLysMetProSer

.multidot. .multidot. .multidot.
.multidot. .multidot.
ThrSerArgProThrAlaProSerSerGluLysGlyGlyAsnTyr

.multidot. 400

33. The nucleic acid of claim 27, which contains a nucleotidic sequence coding for at least part of the aminoacid sequence indicated hereafter:

ProValGlnHisValGlyGlyAsnTyrThrHisIleProLeuSer

.multidot. .multidot. .multidot.
.multidot. .multidot.
ProArgThrLeuAsnAlaTrpValLysLeuValGluGluLysLys

.multidot. .multidot. .multidot.
.multidot.
PheGlyAlaGluValValProGlyPheGlnAlaLeuSerGluGly

500 .multidot. .multidot. .multidot.
.multidot.
CysThrProTyrAspIleAsnGlnMetLeuAsnCysValGlyAsp

.multidot. .multidot. .multidot.
.multidot.
HisGlnAlaAlaMetGlnIleIleArgGluIleIleAsnGluGlu

.multidot. 600 .multidot. .multidot.
.multidot.
AlaAlaGluTrpAspValGlnHisProIleProGlyProLeuPro

.multidot. .multidot. .multidot.
.multidot.
AlaGlyGlnLexArgGluProArgGlySerAspIleAlaGlyThr

.multidot. .multidot. 700 .multidot.
.multidot.
ThrSerThrValGluGluGlnIleGlnTrpMetPheArgProGln

AsnProValProValGlyAsnIleTyrArgArgTrpIleGlnIle

.multidot. .multidot. .multidot. 800
.multidot.
GlyLeuGlnLysCysValArgMetTyrAsnProThrAsnIleLeu

.multidot. .multidot. .multidot.
.multidot.
AspIleLysGlnGlyProLysGluProPheGlnSerTyrValArp

.multidot. .multidot. .multidot.
.multidot. 900
ArgPheTyrLysSerLeuArgAlaGluGlnThrAspProAlaVal

.multidot. .multidot. .multidot.
.multidot.
LysAsnTrpMetThrGlnThrLeuLeuValGlnAsnAlaAsnPro

.multidot. .multidot. .multidot.
.multidot. .multidot.
AspCysLysLeuValLeuLysGlyLeuGlyMetAsnProThrLeu

1000 .multidot. .multidot. .multidot.
GluGluMetLeuThrAlaCysGlnGlyValGlyGlyProGlyGln

.multidot. .multidot. .multidot.
.multidot. .multidot.
LysAlaArgLeuMetAlaGluAlaLeuLysGluValIleGlyPro

.multidot. 1100 .multidot. .multidot.

34. The nucleic acid of claim 27, which contains a nucleotidic sequence coding for at least part of the aminoacid sequence indicated hereafter:

```
    ENVRN
    MetMetAsnGlnLeuLeuIleAlaIleLeuLeuAlaSerAlaCys

              .multidot.          .multidot.          .multidot.
.multidot.
    LeuValTyrCysThrGlnTyrValThrValPheTyrGlyValPro

        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    ThrTrpLysAsnAlaThrIleProLeuPheCysAlaThrArgAsn

           100          .multidot.          .multidot.          .multidot.
    ArgAspThrTrpGlyThrIleGlnCysLeuProAspAstAspAsp

        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    TyrGlnGluIleThrLeuAsnValThrGluAlaPheAspAlaTrp

              .multidot.       200          .multidot.          .multidot.
    AsnAsnThrValThrGluGlnAlaIleGluAspValTrpHisLeu

        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    PheGluThrSerIleLysProCysValLysLeuThrProLeuCys

              .multidot.          .multidot.       300          .multidot.
    ValAlaMetLysCysSerSerThrGluSerSerThrGlyAsnAsn

        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    ThrThrSerLysSerThrSerThrThrThrThrProThrAsp

              .multidot.          .multidot.          .multidot.       400
    GlnGluGlnGluIleSerGluAspThrProCysAlaArgAlaAsp

        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    AsnCysSerGlyLeuGlyGluGluGluThrIleAsnCysGlnPhe

              .multidot.          .multidot.          .multidot.
.multidot.
    AsnMetThrGlyLeuGluArgAspLysLysLysGlnTyrAsnGlu

      500          .multidot.          .multidot.          .multidot.
.multidot.
    ThrTrpTyrSerLysAspValValCysGluThrAsnAsnSerThr

              .multidot.          .multidot.          .multidot.
.multidot.
    AsnGlnThrGlnCysTyrMetAsnEisCysAsnThrSerValIle

        .multidot.       600          .multidot.          .multidot.
.multidot.
    ThrGluSerCysAspLysHisTyrTrpAspAlaIleArgPheArg

              .multidot.          .multidot.          .multidot.
.multidot.
    TyrCysAlaProProGlyTyrAlaLeuLeuArgCysAsnAspThr

        .multidot.          .multidot.       700          .multidot.
.multidot.
    AsnTyrSerGlyPheAlaProAsnCysSerLysValValAlaSer

    ThrCysThrArgMetMetGluThrGlnThrSerThrTrpPheGly

        .multidot.          .multidot.          .multidot.       800
.multidot.
    PheAsnGlyThrArgAlaGluAsnArgThrTyrIleTyrTrpHis

              .multidot.          .multidot.          .multidot.
.multidot.
    GlyArgAspAsnArgThrIleIleSerLeuAsnLysTyrTyrAsn

        .multidot.          .multidot.          .multidot.
.multidot.       900
    LeuSerLeuHisCysLysArgProGlyAsnLysThrValLysGln

              .multidot.          .multidot.          .multidot.
```

```
    IleMetLeuMetSerGlyHisValPheHisSerHisTyrGlnPro

        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    IleAsnLysArgProArgGlnAlaTrpCysTrpPheLysGlyLys

          1000          .multidot.          .multidot.          .multidot.
    TrpLysAspAlaMetGlnGluValLysThrLeuAlaLysHisPro

        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    ArgTyrArgGlyThrAsnAspThrArgAsnIleSerPheAlaAla

              .multidot.      1100          .multidot.          .multidot.
    ProGlyLysGlySerAspProGluValAlaTyrMetTrpThrAsn

        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    CysArgGlyGluPheLeuTyrCysAsnMetThrTrpPheLeuAsn

              .multidot.          .multidot.      1200          .multidot.
    TrpIleGluAsnLysThrHisArgAsnTyrAlaProCysHisIle

        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    LysGlnIleIleAsnThrTrpHisLysValGlyArgAsnValTyr

              .multidot.          .multidot.          .multidot.      1300
    LeuProProArgGluGlyGluLeuSerCysAsnSerThrValThr

        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    SerIleIleAlaAsnIleAspTrpGlnAsnAstAsnGlnThrAsn

              .multidot.          .multidot.          .multidot.
.multidot.
    IleThrPheSerAlaGluValAlaGluLeuTyrArgLeuGluLeu

     1400          .multidot.          .multidot.          .multidot.
.multidot.
    GlyAspTyrLysLeuValGluIleThrProIleGlyPheAlaPro

    ThrLysGluLysArgTyrSerSerAlaHisGlyArgHisThrArg

        .multidot.      1500          .multidot.          .multidot.
.multidot.
    GlyValPheValLeuGlyPheLeuGlyPheLeuAlaThrAlaGly

              .multidot.          .multidot.          .multidot.
.multidot.
    SerAlaMetGlyAlaArgAlaSerLeuThrValSerAlaGlnSer

        .multidot.          .multidot.      1600          .multidot.
.multidot.
    ArgThrLeuLeuAlaGlyIleValGlnGlnGlnGlnGlnLeuLeu

              .multidot.          .multidot.          .multidot.
.multidot.
    AspValValLysArgGlnGlnGluLeuLeuArgLeuThrValTrp

        .multidot.          .multidot.          .multidot.      1700
.multidot.
    GlyThrLysAsnLeuGlnAlaArgValThrAlaIleGluLysTyr

                        .multidot.          .multidot.          .multidot.
    LeuGlnAspGlnAlaArgLeuAsnSerTrpGlyCysAlaPheArg

        .multidot.          .multidot.          .multidot.
.multidot.      1800
    GlnValCysHisThrThrValProTrpValAsnAspSerLeuAla

              .multidot.          .multidot.          .multidot.
.multidot.
    ProAspTrpAspAsnMetThrTrpGlnGluTrpGluLysGlnVal

        .multidot.          .multidot.          .multidot.
.multidot.          .multidot.
    ArgTyrLeuGluAlaAsnIleSerLysSerLeuGluGlnAlaGln

          1900          .multidot.          .multidot.          .multidot.
    IleGlnGlnGluLysAsnMetTyrGluLeuGlnLysLeuAsnSer
```

.multidot. .multidot.
TrpAspIlePheGlyAsnTrpPheAspLeuThrSerTrpValLys

.multidot. 2000 .multidot. .multidot.
TyrIleGlnTyrGlyValLeuIleIleValAlaValIleAlaLeu

.multidot. .multidot. .multidot.
.multidot. .multidot.
ArgIleValIleTyrValValGlnMetLeuSerArgLeuArgLys

.multidot. .multidot. 2100 .multidot.
GlyTyrArgProValPheSerSerProProGlyTyrIleGlnGln

IleEisIleEisLysAspArgGlyGlnProAlaAsnGluGluThr

.multidot. .multidot. .multidot. 2200
GluGluAspGlyGlySerAsnGlyGlyAspArgTyrTrpProTrp

.multidot. .multidot. .multidot.
.multidot. .multidot.
ProIleAlaTyrIleHisPheLeuIleArgGlnLeuIleArgLeu

.multidot. .multidot. .multidot.
.multidot.
LeuThrArgLeuTyrSerIleCysArgAspLeuLeuSerArgSer

2300 .multidot. .multidot. .multidot.
.multidot.
PheLeuThrLeuGlnLeuIleTyrGlnAsnLeuArgAspTrpLeu

.multidot. .multidot. .multidot.
.multidot.
ArgLeuArgThrAlaPheLeuGlnTyrGlyCysGluTrpIleGln

.multidot. 2400 .multidot. .multidot.
.multidot.
GluAlaPheGlnAlaAlaAlaArgAlaThrArgGluThrLeuAla

.multidot. .multidot. .multidot.
.multidot.
GlyAlaCysArgGlyLeuTrpArgValLeuGluArgIleGlyArg

.multidot. .multidot. 2500 .multidot.
.multidot.
GlyIleLeuAlaValProArgArgIleArgGlnGlyAlaGluIle

.multidot. .multidot. .multidot.
.multidot.
AlaLeuLeu***GlyThrAlaValSerAlnGlyArgLeuTyrGlu

.multidot. .multidot. .multidot. 2600
.multidot.
TyrSerMetGluGlyProSerSerArgLysGlyGluLysPheVal

.multidot. .multidot. .multidot.
.multidot.
GlnAlaThrLysTyrGly

.multidot. .multidot.

35. The nucleic acid of anyone of claims 28 to 34 which is formed a recombinant nucleic acid comprising a nucleic acid from a vector and in which said cDNA or part of said cDNA is inserted.

36. The recombinant nucleic acid of claim 35 which is labelled.

37. A process for the detection of HIV-2 retrovirus or of its RNA in a biological liquid or tissue, particularly for the in vitro diagnosis in man of the potentiality or existence of LAS or of AIDS, which comprises contacting nucleic acids contained in said biological liquid or tissue with a probe containing a nucleic acid according to anyone of claims 28 to 36 under stringent hybridization conditions for the time necessary for said hybridization to occur, washing the hybride formed with a solution ensuring the preservation of said stringent conditions, and detecting the hybride formed.

38. A process for the production of HIV-2 retrovirus which comprises culturing human T4 lymphocytes or permanent cell lines derived from said T4 lymphocytes and carrying the T4 phenotype, which lymphocytes or cell lines had previously been infected with an isolate of HIV-2 virus and, particularly when the level of **reverse transcriptase** activity has reached a determined threshold, recovering and purifying the amounts of

particularly by differential centrifugation in a gradient of sucrose or metrizamide.

39. A process for the production of specific antigen of HIV-2 retrovirus which comprises lysing, particularly by means of detergent such as SDS (for instance 0.1% SDS in a RIPA buffer) and recovering the lysate containing said antigens;

40. Process for the production of one of the above defined proteins (p12, p16 or p26) or of a protein having the structure of gp140 or of determined parts of said proteins, which process comprises inserting the corresponding nucleic acid sequence in a vector capable of transforming an appropriate host,enabling the expression of an insert containing in said vector, transforming said host by said vector which comprises the said nucleotidic sequence, culturing the transformed cell lines host, recovering and purifying the expressed protein.

41. Process for the production of a hybridization probe for the detection of the RNA of HIV-2 retrovirus which comprises a DNA sequence, particularly according to anyone of claims 27 to 35, in a cloning vector by in vitro recombination, cloning the modified vector obtained in a competent cellular host, and recovering the DNA-recombinants obtained.

L3 ANSWER 2 OF 3 USPATFULL on STN
2002:99071 A METHOD FOR PREPARING A VIRAL EXTRACT CONTAINING HIV-II RNA.
Montagnier, Luc, Le Plessis Robinson, FRANCE
Chamaret, Solange, Paris, FRANCE
Guetard, Denise, Paris, FRANCE
Alizon, Marc, Paris, FRANCE
Clavel, Francois, Paris, FRANCE
Guyader, Mireille, Paris, FRANCE
Sonigo, Pierre, Paris, FRANCE
Brun-Vezinet, Francoise, Paris, FRANCE
Rey, Marianne, Paris, FRANCE
Rouzioux, Christine, Paris, FRANCE
Katlama, Christine, Paris, FRANCE
Institut Pasteur, Paris, FRANCE (non-U.S. corporation)
US 2002051967 A1 20020502
APPLICATION: US 2001-862511 A1 20010523 (9)
PRIORITY: WO 1987-FR25 19870122
FR 1986-910 19860122
FR 1986-911 19860122
FR 1986-1635 19860206
FR 1986-1985 19860213
FR 1986-3881 19860318
FR 1986-4215 19860324
DOCUMENT TYPE: Utility; APPLICATION.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CLM What is claimed is:
1. HIV-2 retrovirus or variance of this virus, which retrovirus has infectious properties with respect to human T4 lymphocytes and the essential morphological and immunological properties of any of the retroviruses deposited at the CNCM under N° I-502, I-532, I-642 and I-643.

2. The purified retrovirus of claim 1 which possesses the following properties: the preferred target for the HIV-2 retrovirus consists of human Leu 3 cells (or T4 lymphocytes) and for permanent cell lines derived of said T4 lymphocytes; it is cytotoxic for the human T4 lymphocytes which it infects; it has a **reverse transcriptase** activity which requires the presence of Mg^{2+} ions and has a strong affinity for poly adenylate oligodeoxythymidylate (poly(A)-oligo(dT) 12-18) it has a density of approximately 1.16 in a sucrose gradient; it has a mean diameter of 140 nanometers and a core having mean diameter of 41 nanometers it can be cultivated in permanent cell lines expressing the T4 protein; it is not infectious in T8 lymphocytes the lysates of this virus contain p26 protein which does not crossreact immunologically with p24 protein of the HTLV-1 virus or of the HTLV-2 ; said lysates further contain p-16 protein which is not recognized immunologically by p19 protein of HTLV-1 or of HTLV-2 in radioimmunoprecipitation assays; said lysates further contain an envelope glycoprotein having a molecular weight of the order of 130,000-140,000 which does not crossreact immunologically with gp110 of HTLV-1 retrovirus ; said lysates further contain a molecule which can be labelled by ^{35}S-cystein, having an apparent molecular weight of about 36,000; the genomic RNA of HIV-2 hybridizes neither with the genomic RNA, nor with the EhV qene, nor with the LTRs of HIV-1 under stringent conditions; the genomic RNA of HIV-2 hybridizes weakly under non-stringent conditions with nucleotide sequences of the GAG region of the HIV-1 genome.

having an apparent molecular weight of 42,000-45,000.

4. The retrovirus of any of claims 1 to 3, wherein the nucleotidic sequence of its genomic RNA which comprises the R region and the U3 region also comprises a nucleotidic sequence which corresponds with the following nucleotide sequence:

GTGGAAGGCGAGACTGAAAGCAAGAGGAATACCATTTAGTTAAAGGACAG

GAACAGCTATACTTGGTCAGGGCAGGAAGTAACTAACAGAAACAGCTGAG

ACTGCAGGGACTTTCCAGAAGGGGCTGTAACCAAGGGAGGGACATGGGAG

GAGCTGGTGGGGAACGCCTCATATTCTCTGTATAATATACCCGCTGCTTG

CATTGTACTTCAGTCGCTCTGCGGAGAGGCTGGCAGATTGAGCCCTGGAG

GATCTCTCCAGCACTAGACGGATGAGCCTGGGTGCCCTGCTAGACTCTCA

CCAGCACTTGGCCGGTGCTGGCAGACGGCCCCACGCTTGCCTGCTTAAAA

ACCTTCCTTAATAAAGCTGCAGTAGAAGCA

5. The retrovirus of anyone of claims 1 to 4 whose genomic RNA also contains a GAG sequence which corresponds with the following nucleotide sequence

ATGGGCGCGAGAAACTCCGTCTTGAGAGGGAAAAAAGCAGATGAA

TTAGAAAGAATCAGGTTACGGCCCGGCGCAAAGAAAAAGTACAGG

CTAAAACATATTGTGTGGGCAGCGAATAAATTGGACAGATTCGGA

TTAGCAGAGAGCCTGTTGGAGTCAAAAGAGGGTTGTCAAAAAATT

CTTACAGTTTTAGATCCAATGGTACCGACAGGTTCAGAAAATTTA

AAAAGTCTTTTTAATACTGTCTGCGTCATTTGGTGCATACACGCA

GAAGAGAAAGTGAAAGATACTGAAGGAGCAAAACAAATAGTGCGG

AGACATCTACTGGCAGAAACAGGAACTGCAGAGAAAATGCCAAGC

ACAAGTAGACCAACAGCACCATCTAGCGAGAAGGGAGGAAATTAC

CCAGTGCAACATGTAGGCGGCAACTACACCCATATACCGCTGAGT

CCCCGAACCCTAAATGCCTGGCTAAAATTAGTAGACGAAAAAAAG

TTCGGCGCAGAAGTAGTGCCAGGATTTCAGGCACTCTCAGAAGGC

TGCACGCCCTATGATATCAACCAAATGCTTAATIUTGTGGGCCAC

CATCAAGCAGCCATGCAGATAATCAGGGAGATTATCAATGAGGAA

GCAGCAGAATGGGATGTGCAACATCCAATACCAGGCCCCTTACCA

GCGGGGCAGCTTAGAGAGCCAAGGGGATCTGACATAGCAGGGACA

ACAAGCACAGTAGAAGAACAGATCCAGTGGATGTTTAGGCCACAA

AATCCTGTACCAGTAGGAAACATCTATAGAAGATGGATCCAGATA

GGATTGCAGAAGTGTGTCAGGATGTACAACCCGACCAACATCCTA

CACATAAAACAGGGACCAAAGGAGCCCTTCCAAAGCTATGTAGAT
* * * * 900

AGATTCTACAAAAGCTTGAGGGCAGAACAAACAGATCCAGCAGTG
* * * *

AAGAATTGGATGACCCAAACACTGCTAGTACAAAATGCCAACCCA
* * * * *

GACTGTAAATTAGTGCTAAAAGGACTAGGGATGAACCCTACCTTA
1000 * * *

GAAGAGATGCTGACCGCCTGTCAGGGGGTAGGTGGGCCAGGCCAG
* * * * *

AAAGCTAGATTAATGGCAGAGGCCCTGAAAGAGGTCATAGGACCT
* 1100 * *

GCCCCTATCCCATTCGCAGCAGCCCAGCAGAGAAAGCCATTTAAA
* * * * *

TGCTGGAACTGTGGAAAGGAAGGGCACTCGGCAAGACAATGCCGA
* * 1200 *

GCACCTACAAGGCAGGGCTGCTGGAAGTCTGGTAAGCCACGACAC
* * * * *

ATCATCACAAACTGCCCAGATAGACAGGCAGGTTTTTTAGGACTG
* * * 1300

GGCCCTTGGGGAAAGAAGCCCCGCAACTTCCCCGTGGCCCAAGTT
* * * * *

CCGCAGCGGCTGACACCAACAGCACCCCCAGTGGATCCAGCACTG
* * * *

GATCTACTGGAGAAATATATGCAGCAAGGGAAAAGACAGAGAGAG
1400 * * * *

CAGAGAGAGAGACCATACAACGAACTCACAGAGGACTTACTGCAC
* * * *

CTCGAGCAGGGGGAGACACCATACAGGGAGCCACCAACAGAGGAC
* 1500 * * *

TTGCTGCACCTCAATTCTCTCTTTGGAAAAGACCAG
* * *

6. The retrovirus of anyone of claims 1 to 5 whose genomic RNA contains an ENV sequence which corresponds with the following nucleotide sequence:

ATGATGAATCAGCTGCTTATTGCCATTTTATTAGCTAGTGCTTGC
* * * *

TTAGTATATTGCACCCAATATGTAACTGTTTTCTATGGCGTACCC
* * * * *

ACGTGGAAAAATGCAACCATTCCCCTCTTTTGTGCAACCAGAAAT
100 * * *

AGGGATACTTGGGGAACCATACAGTGCTTGCCTGACAATGATGAT
* * * * *

TATCAGGAAATAACTTTGAATGTAACACAGGCTTTTGATGCATGG
200 * *

AATAATACAGTAACAGAACAAGCAATAGAAGATGTCTGGCATCTA
* * * *

TTCGAGACATCAATAAAACCATGTGTCAAACTAACACCTTTATGT
* * 300 *

GTAGCAATGAAATGCAGCAGCACAGAGAGCAGCACAGGGAACAAC
* * * * *

ACAACCTCAAAGAGCACAAGCACAACCACAACCACACCCACAGAC
* * * 400

CAGGAGCAAGAGATAAGTGAGGATACTCCATGCGCACGCGCAGAC
* * * * *

```
          *         *         *         *

AATATGACAGGATTAGAAAGAGATAAGAAAAAACAGTATAATGAA
  500         *         *         *         *

ACATGGTACTCAAAAGATGTGGTTTGTGAGACAAATAATAGCACA
          *         *         *         *

AATCAGACCCAGTGTTACATGAACCATTGCAACACATCAGTCATC
    *        600         *         *         *

ACAGAATCATGTGACAAGCACTATTGGGATGCTATAAGGTTTAGA
          *         *         *         *

TACTGTGCACCACCGGGTTATGCCCTATTAAGATGTAATGATACC
    *         *        700         *         *

AATTATTCAGGCTTTGCACCCAACTGTTCTAAAGTAGTAGCTTCT

ACATGCACCAGGATGATGGAAACGCAAACTTCCACATGGTTTGGC
    *         *         *        800         *

TTTAATGGCACTAGAGCAGAGAATAGAACATATATCTATTGGCAT
          *         *         *         *

GGCAGAGATAATAGAACTATCATCAGCTTAAACAAATATTATAAT
    *         *         *         *        900

CTCAGTTTGCATTGTAAGAGGCCAGGGAATAAGACAGTGAAACAA
          *         *         *         *

ATAATGCTTATGTCAGGACATGTGTTTCACTCCCACTACCAGCCG
    *         *         *         *         *

ATCAATAAAAGACCCAGACAAGCATGGTGCTGGTTCAAAGGCAAA
      1000         *         *         *

TGGAAAGACGCCATGCAGGAGGTGAAGACCCTTGCAAAACATCCC
    *         *         *         *         *

AGGTATAGAGGAACCAATGACACAAGGAATATTAGCTTTGCAGCG
          *      1100         *         *

CCAGGAAAAGGCTCAGACCCAGAAGTAGCATACATGTGGACTAAC
    *         *         *         *         *

TGCAGAGGAGAGTTTCTCTACTGCAACATGACTTGGTTCCTCAAT
          *         *      1200         *

TGGATAGAGAATAAGACACACCGCAATTATGCACCGTGCCATATA
    *         *         *         *         *

AAGCAAATAATTAACACATGGCATAAGGTAGGGAGAAATGTATAT
          *         *         *     1300

TTGCCTCCCAGGGAAGGGGAGCTGTCCTGCAACTCAACAGTAACC
    *         *         *         *         *

AGCATAATTGCTAACATTGACTGGCAAAACAATAATCAGACAAAC
          *         *         *         *

ATTACCTTTAGTGCAGAGGTGGCAGAACTATACAGATTGGAGTTG
 1400         *         *         *         *

GGAGATTATAAATTGGTAGAAATAACACCAATTGGCTTCGCACCT

ACAAAAGAAAAAAGATACTCCTCTGCTCACGGGAGACATACAAGA
    *       1500         *         *         *

GGTGTGTTCGTGCTAGGGTTCTTGGGTTTTCTCGCAACAGCAGGT
          *         *         *         *

TCTGCAATGGGCGCTCGAGCGTCCCTGACCGTGTCGGCTCAGTCC
    *         *       1600         *         *

CGGACTTTACTGGCCGGGATAGTGCAGCAACAGCAACAGCTGTTG
          *         *         *         *

GACGTGGTCAAGAGACAACAAGAACTGTTGCGACTGACCGTCTGG
    *         *         *      1700         *

GGAACGAAAAACCTCCAGGCAAGAGTCACTGCTATAGAGAAGTAC
```

CTACAGGACCAGGCGCGGCTAAATTCATGGGGATGTGCGTTTAGA
    *   *   *   *   1800

CAAGTCTGCCACACTACTGTACCATGGGTTAATGATTCCTTAGCA
         *   *   *   *

CCTGACTGGGACAATATGACGTGGCAGGAATGGGAAAAACAAGTC
    *   *   *   *   *

CGCTACCTGGAGGCAAATATCAGTAAAAGTTTAGAACAGGCACAA
      1900   *   *   *

ATTCAGCAAGAGAAAAATATGTATGAACTACAAAAATTAAATAGC
    *   *   *   *   *

TGGGATATTTTTGGCAATTGGTTTGACTTAACCTCCTGGGTCAAG
         *   2000   *   *

TATATTCAATATGGAGTGCTTATAATAGTAGCAGTAATAGCTTTA
    *   *   *   *   *

AGAATAGTGATATATGTAGTACAAATGTTAAGTAGGCTTAGAAAG
         *   *   2100   *

GGCTATAGGCCTGTTTTCTCTTCCCCCCCCGGTTATATCCAACAG

ATCCATATCCACAAGGACCGGGGACAGCCAGCCAACGAAGAAACA
         *   *   *   2200

GAAGAAGACGGTGGAAGCAACGGTGGAGACAGATACTGGCCCTGG
    *   *   *   *   *

GCGATAGCATATATACATTTCCTGATCCGCCAGCTGATTCGCCTC
         *   *   *   *

TTGACCAGACTATACAGCATCTGCAGGGACTTACTATCCAGGAGC
 2300   *   *   *   *

TTCCTGACCCTCCAACTCATCTACCAGAATCTCAGAGACTGGATG
         *   *   *   *

AGACTTAGAACAGCCTTCTTGCAATATGGGTGCGAGTGGATCCAA
    *   2400   *   *   *

GAAGCATTCCAGGCCGCCGCGAGGGCTACAAGAGAGACTCTTGCG
         *   *   *   *

GGCGCGTGCAGGGGCTTGTGGAGGGTATTGGAACGAATCGGGAGG
    *   *   2500   *   *

GGAATACTCGCGGTTCCAAGAAGGATCAGACAGGGAGCAGAAATC
         *   *   *   *

GCCCTCCTGTGAGGGACGGCAGTATCAGCAGGGAGACTTTATGAA
    *   *   *   2600   *

TACTCCATGGAAGGACCCAGCAGCAGAAAGGGAGAAAAATTTGTA
         *

CAGGCAACAAAATATGGA

7. The retrovirus of anyone of claims 1 to 6 whose RNA virtually hybridizes neither with the ENV gene and the LTR close to it, particularly with the nucleotide sequence 5290-9130 of MTV-1, nor with the sequences of the POL region of the HIV-1 genome, particularly with the nucleotide sequence 2170-2240 of HIV-1.

8. A composition comprising at least one antigen, particularly a protein or glycoprotein of HIV-2 virus according to anyone of claims 1 to 7.

9. The composition of claim 8 which consists of total extract or lysate of said retrovirus.

10. The composition of claim 8 wherein said antigen consists of at least one of the internal core proteins of said virus, particularly p12, p16 and p26, which have apparent molecular weight of the order of 12,000, 16,000 and 26,000.

11. The composition of claim 8, characterized in that it contains a gp140 glycoprotein having an apparent molecular weight of about 130,000-140,000.

12. An antigen which provides a single bound in electrophoresis on a polyacrylamid gel which comprises, in common with one of the purified antigens of HIV-2 retrovirus, an epitope that is recognized by the serum of a carrier of antibody against HIV-2.

13. A purified antigen having the immunological characteristics of one of the following proteins or glycoproteins of HIV-2: p12, p16, p26, p36, p42 and gp140.

14. An antigen of claim 13 which has the following aminoacid sequence or a part of said sequence recognized by anti-p12 antibodies:

```
                                ArgLysAlaPheLys
                                    *         *

CysTrpAsnCysGlyLysGluGlyHisSerAlaArgGlnCysArg
          *         *      1200         *

AlaProArgArgGlnGlyCysTrpLysCysClyLysProGlyHis
               *         *         *         *

IleMetThrAsnCysProAspArgGlnAlaGlyPheLeuGlyLeu
          *         *         *    1300

GlyProTrpGlyLysLysProArgAsnPheProValAlaGlnVal
    *         *         *         *         *

ProGlnGlyLeuThrProThrAlaProProValAspProAlaVal
          *         *         *         *

AspLeuLeuGluLysTyrMetGlnGlnGlyLysArgGlnArgGlu
 1400         *         *         *         *

GlnArgGluArgProTyrLysGluValThrGluAspLeuLeuHis
          *         *         *         *

LeuGluGlnGlyGluThrProTyrArgGluProProThrGluAsp
    *      1500         *         *

LeuLeuHisLeuAsnSerLeuPheGlyLysAspGln
```

15. An antigen of claim 13 which has the following aminoacid sequence or a part of said sequence recognized by anti-p16 antibodies:

```
MetGlyAlaArgAsnSerValLeuArgGlyLysLysAlaAspGlu
          *         *         *         *

LeuGluArgIleArgLeuArgProGlyGlyLysLysLysTyrArg
    *         *         *         *         *

LeuLysHisIleValTrpAlaAlaAsnLysLeuAspArgPheGly
       100         *         *         *

LeuAlaGluSerLeuLeuGluSerLysGluGlyCysGlnLysIle
    *         *         *         *         *

LeuThrValLeuAspProMetValProThrGlySerGluAsnLeu
          *       200         *         *

LysSerLeuPheAsnThrValCysValIleTrpCysIleHisAla
    *         *         *         *         *

GluGluLysValLysAspThrGluGlyAlaLysGlnIleValArg
          *         *       300         *

ArgHisLeuValAlaGluThrGlyThrAlaGluLysMetProSer
    *         *         *         *         *

ThrSerArgProThrAlaProSerSerGluLysGlyGlyAsnTyr
```

16. An antigen of claim 13 which has the following aminoacid sequence or a part of said sequence recognized by anti-p26 antibodies:

```
ProValGlnHisValGlyGlyAsnTyrThrHisIleProLeuSer
    *         *         *         *         *

ProArgThrLeuAsnAlaTrpValLysLeuValGluGluLysLys
          *         *         *         *

PheGlyAlaGluValValProGlyPheGlnAlaLeuSerGluGly
  500         *         *         *         *
```

HisGluAlaAlaMetGlnPheIleArgGluIleIleAsnGluGlu
600

AlaAlaGluTrpAspValGlnHisProIleProGlyProLeuPro

AlaGlyGlnLeuArgGluProArgGlySerHisIleAlaGlyThr
700

ThrSerThrValGluGluGlnIleGlnTrpMetPheArgProGln

AsnProValProValGlyAsnIleTyrArgArgTrpIleGlnIle
800

GlyLeuGlnLysCysValArgMetTyrAsnProThrAsnIleLeu

AspIleLysGlnGlnProLysGluProPheGlnSerTyrValAsp
900

ArgPheTyrLysSerLeuArgAlaGluGlnThrAspProAlaVal

LysAsnTrpMetThrGlnThrLeuLeuValGlnAsnAlaAsnPro

AspCysLysLeuValLeuLysGlyLeuGlyMetAsnProThrLeu
1000

GluGluMetLeuThrAlaCysGlnGlyValGlyGlyProGlyGln

LysAlaArgLeuMetAlaGluAlaLeuLysGluValIleGlyPro
1100

AlaProIleProPheAlaAlaAlaGlnGln

17. An antigen of claim 13 which has the following aminoacid sequence or a part of said sequence recognized by anti-gp140 antibodies:

MetMetAsnGlnLeuLeuIleAlaIleLeuLeuAlaSerAlaCys

LeuValTyrCysThrGlnTyrValThrValPheTyrGlyValPro

ThrTrpTysAsnAlaThrIleProLeuPheCysAlaThrArgAsn
100

ArgAspThrTrpGlyThrIleGlnCysLeuProAspAsnAspAsp

TyrGlnGluIleThrLeuAsnValThrGluAlaPheAspAlaTrp
200

AsnAsnThrValThrGluGlnAlaIleGluAspValTrpHisLeu

PheGluThrSerIleLysProCysValLysLeuThrProLeuCys
300

ValAlaMetLysCysSerSerThrGluSerSerThrClyAsnAsn

ThrThrSerLysSerThrSerThrThrThrThrThrProThrAsp
400

GlnGluGlnGluIleSerGluAspThrProCysAlaArgAlaAsp

AsnCysSerGlyLeuGlyGluGluGluThrIleAsnCysGlnPhe

AsnMetThrGlyLeuGluArgAspLysLysLysGlnTyrAsnGlu
500

ThrTrpTyrSerLysAspValValCysGluThrAsnAsnSerThr

AsrGlnThrGlnCysTyrMetAsnHisCysAsnThrSerValIle

```
ThrGluSerCysAspLysHisTyrTrpAspAlaIleArgPheArg
         *         *         *         *

TyrCysAlaProProGlyTyrAlaLeuLeuArgCysAsnAspThr
    *         *      700          *         *

AsnTyrSerGlyPheAlaProAsnCysSerLysValValAlaSer

ThrCysThrArgMetMetGluThrGlnThrSerThrTrpPheGly
    *         *         *       800         *

PheAsnGlyThrArgAlaGluAsnArgThrTyrIleTyrTrpHis
         *         *         *         *

GlyArgAspAsnAlaThrIleIleSerLeuAsnLysTyrTyrAsn
    *         *         *         *       900

LeuSerLeuHisCysLysArgProGlyAsnLysThrValLysGln
         *         *         *         *

IleMetLeuMetSerGlyHisValPheHisSerHisTyrGlnPro
    *         *         *         *         *

IleAsnLysArgProArgGlnAlaTrpCysTrpPheLysGlyLys
      1000        *         *         *

TrpLysAspAlaMetGlnGluValLysThrLeuAlaLysHisPro
    *         *         *         *         *

ArgTyrArgGlyThrAsnAspThrArgAsnIleSerPheAlaAla
         *      1100         *         *

ProGlyLysGlySerAspProGluValAlaTyrMetTrpThrAsn
    *         *         *         *         *

CysArgGlyGluPheLeuTyrCysAsnMetThrTrpPheLeuAsn
         *         *      1200         *

TrpIleGluAsnLysThrHisArgAsnTyrAlaProCysHisIle
    *         *         *         *         *

LysGlnIleIleAsnThrTrpHisLysValGlyArgAsnValTyr
         *         *         *      1300

LeuProProArgGluGlyGluLeuSerCysAsnSerThrValThr
    *         *         *         *         *

SerIleIleAlaAsnIleAsnTrpGlnAsnAsnAsnGlnThrAsn
         *         *         *         *

IleThrPheSerAlaGluValAlaGluLeuTyrArgLeuGluLeu
 1400        *         *         *         *

GlyAspTyrLysLeuValGluIleThrProIleGlyPheAlaPro

ThrLysGluLysArgTyrSerSerAlaHisGlyArgHisThrArg
    *      1500         *         *         *

GlyValPheValLeuGlyPheLeuGlyPheLeuAlaThrAlaGly
         *         *         *         *

SerAlaSerGlyAlaArgAlaSerLeuThrValSerAlaGlnSer
    *         *      1600         *         *

ArgThrLeuLeuAlaGlyIleValGlnGlnGlnGlnGlnLeuLeu
         *         *         *         *

AspValValLysArgGlnGlnGluLeuLeuArgLeuThrValTrp
    *         *         *      1700         *

GlyThrLysAsnLeuGlnAlaArgValThrAlaIleGluLysTyr
                   *         *         *

LeuGlnAspGlnAlaArgLeuAsnSerTrpGlyCysAlaPheArg
    *         *         *         *      1800

GlnValCysHisThrThrValProTrpValAsnAspSerLeuAla
         *         *         *         *

ProAspTrpAspAsnMetThrTrpGlnGluTrpGluLysGlnVal
    *         *         *         *         *
```

```
ArgTyrLeuGluAlaAsnIleSerLysSerLeuGluGlnAlaGln
      1900         *         *         *

IleGlnGlnGluLysAsnMetTyrGluLeuGlnLysLeuAsnSer
    *         *         *         *         *

TrpAspIlePheGlyAsnTrpPheAspLeuThrSerTrpValLys
          *      2000         *         *

TyrIleGlnTyrGlyValLeuIleIleValAlaValIleAlaLeu
    *         *         *         *         *

ArgIleValIleTyrValValGlnMetLeuSerArgLeuArgLys
          *         *      2100         *

GlyTyrArgProValPheSerSerProProGlyTyrIleGlnGln

IleHisIleHisLysAspArgGlyGlnProAlaAsnGluGluThr
          *         *         *      2200

GluGluAspGlyGlySerAsnGlyGlyAspArgTyrTrpProTrp
    *         *         *         *         *

ProIleAlaTyrIleHisPheLeuIleArgGlnLeuIleArgLeu
          *         *         *         *

LeuThrArgLeuTyrSerIleCysArgAspLeuLeuSerArgSer
 2300         *         *         *         *

PheLeuThrLeuGlnLeuIleTyrGlnAsnLeuArgAspTrpLeu
          *         *         *         *

ArgLeuArgThrAlaPheLeuGlnTyrGlyCysGluTrpIleGln
    *      2400         *         *         *

GluAlaPheGlnAlaAlaAlaArgAlaThrArgGluThrLeuAla
          *         *         *         *

GlyAlaCysArgGlyLeuTrpArgValLeuGluArgIleGlyArg
    *         *      2500         *         *

GlyIleLeuAlaValProArgArgIleArgGlnGlyAlaGluIle
          *                   *         *         *

AlaLeuLeu.star..star..star.GlyThrAlaValSerAlaGlyArgLeuTyrGlu
    *         *         *      2600         *

TyrSerMetGluGlyProSerSerArgLysGlyGluLysPheVal
          *         *         *         *

GlnAlaThrLysTyrGly
    *         *
```

18. A method for the in vitro detection of the presence of antibodies against anti-HIV-2 in a biological liquid, such as a serum, more particularly for the in vitro diagnosis of a potential or existing LAS or AIDS caused by HIV-2 type retrovirus, which comprises contacting a serum or other biological medium from the person to be diagnosed with a composition according to anyone of claims 8 to 11 or with an antigen according to anyone of claims 12 to 17, detecting the immunological conjuguate possibly formed between said anti-HIV-2-antibodies and the antigen or antigens used.

19. The method of claim 18 which comprises achieving the detection of said immunological conjuguate by reacting said immunological conjuguate possibly formed with a labelled reagent formed either by human antiimmunoglobulin-antibodies or of a bacterial A protein, and by detecting the complexe formed between the reagent and said immunological conjuguate.

20. Kit for the detection of anti-HIV-2-antibodies in a biological fluid, particularly of a person possibly carrying such antibodies, which comprises: a composition such as defined in anyone of claims 8 to 11 or an antigen such as defined in any of claims 12 to 17; and means for detecting the immunological complexe resulting from the immunological reaction between the antigen and said biological fluid.

21. The kit of claim 21, whose means for detecting the immunological complexe formed comprises human anti-immunoglobulins or a protein A and a means for detecting the complexe formed between the anti-HIV-2 antibodies contained in the detected immunological conjuguate.

HIV-2 retrovirus, such as gp140 of said retrovirus, or part of said glycoprotein, in association with a pharmaceutically acceptable vehicle appropriate for the constitution of vaccines effective against HIV-2.

23. The composition of claim 22 which contains at least part of an immunogenic glycoprotein comprising the proteic backbone having the following sequence:

```
    ENVRN
    MetMetAsnGlnLeuLeuIleAlaIleLeuLeuAlaSerAlaCys
             *         *         *         *

    LeuValTyrCysThrGlnTyrValThrValPheTyrGlyValPro
        *         *         *         *         *

    ThrTrpLysAsnAlaThrIleProLeuPheCysAlaThrArgAsn
           100         *         *         *

    ArgAspThrTrpGlyThrIleGlnCysLeuProAspAsnAspAsp
        *         *         *         *         *

    TyrGlnGluIleThrLeuAsnValThrGluAlaPheAspAlaTrp
             *       200         *         *

    AsnAsnThrValThrGluGlnAlaIleGluAspValTrpHisLeu
        *         *         *         *         *

    PheGluThrSerIleLysProCysValLysLeuThrProLeuCys
             *         *       300         *

    ValAlaIleLysCysSerSerThrGluSerSerThrGlyAsnAsn
        *         *         *         *         *

    ThrThrSerLysSerThrSerThrThrThrThrProThrAsp
             *         *         *       400

    GlnGluGlnGluIleSerGluAspThrProCysAlaArgAlaAsn
        *         *         *         *         *

    AsnCysSerGlyLeuGlyGluGluGluThrIleAsnCysGlnPhe
             *         *         *         *

    AsnMetThrGlyLeuGluArgAspLysLysLysGlnTyrAsnGlu
      500         *         *         *         *

    ThrTrpTyrSerLysAspValValCysGluThrAsnAsnSerThr
           *         *         *         *

    AsnGlnThrGlnCysTyrMetAsnHisCysAsnThrSerValIle
        *       600         *         *         *

    ThrGluSerCysAspLysHisTyrTrpAspAlaIleArgPheArg
             *         *         *         *

    TyrCysAlaProProGlyTyrAlaLeuLeuArgCysAsnAspThr
        *         *       700         *         *

    AsnTyrSerGlyPheAlaProAsnCysSerLysValValAlaSer

    ThrCysThrArgMetMetGluThrGlnThrSerThrTrpPheGly
        *         *         *       800         *

    PheAsnGlyThrArgAlaGluAsnArgThrTyrIleTyrTrpHis
             *         *         *         *

    GlyArgAspAsnArgThrIleIleSerLeuAsnLysTyrTyrAsn
        *         *         *         *       900

    LeuSerLeuHisCysLysArgProGlyAsnLysThrValTysGln
             *         *         *         *

    IleMetLeuMetSerGlyHisValPheHisSerHisTyrGlnPro
        *         *         *         *         *

    IleAsnLysArgProArgGlnAlaTrpCysTrpPheLysGlyLys
          1000         *         *         *

    TrpLysAspAlaMetGlnGluValLysThrLeuAlaLysHisPro
        *         *         *         *         *

    ArgTyrArgGlyThrAsnAspThrArgAsnIleSerPheAlaAla
             *      1100         *         *
```

```
ProGlyLysGlySerAspProGluValAlaTyrMerTrpThrAsn
    *         *         *         *         *

CysArgGlyGluPheLeuTyrCysAsnMetThrTrpPheLeuAsn
         *         *      1200         *

TrpIleGluAsnLysThrHisArgAsnTyrAlaProCysHisIle
    *         *         *         *         *

LysGlnIleIleAsnThrTrpHisLysValGlyArgAsnValTyr
         *         *         *      1300

LeuProProArgGluGlyGluLeuSerCysAsnSerThrValThr
    *         *         *         *         *

SerIleIleAlaAsnIleAspTrpGlnAsnAsnAsnGlnThrAsn
         *         *         *         *

IleThrPheSerAlaGluValAlaGluLeuTyrArgLeuGluLeu
 1400        *         *         *         *

GlyAspTyrLysLeuValGluIleThrProIleGlyPheAlaPro

ThrLysGluLysArgTyrSerSerAlaHisGlyArgHisThrArg
    *      1500         *         *         *

GlyValPheValLeuGlyPheLeuGlyPheLeuAlaThrAlaGly
         *         *         *         *

SerAlaMetGlyAlaArgAlaSerLeuThrValSerAlaGlnSer
    *         *      1600         *         *

ArgThrLeuLeuAlaGlyIleValGlnGlnGlnGlnGlnLeuLeu
         *         *         *         *

AspValValLysArgGlnGlnGluLeuLeuArgLeuThrValTrp
    *         *         *      1700         *

GlyThrLysAsnLeuGluAlaArgValThrAlaIleGluLysTyr
                   *         *         *

LeuGlnAspGlnAlaArgLeuAsnSerTrpGlyCysAlaPheArg
    *         *         *         *      1800

GluValCysHisThrThrValProTrpValAsnAspSerLeuAla
         *         *         *         *

ProAspTrpAspAsnMetThrTrpGluGluTrpGluLysGlnVal
    *         *         *         *         *

ArgTyrLeuGluAlaAsnIleSerLysSerLeuGluGlnAlaGln
      1900        *         *         *

IleGlnGlnGluLysAsnMetTyrGluLeuGlnLysLeuAsnSer
    *         *         *         *         *

TrpAspIlePheGlyAsnTrpPheAspLeuThrSerThrValLys
         *      2000         *         *

TyrIleGlnTyrGlyValLeuIleIleValAlaValIleAlaLeu
    *         *         *         *         *

ArgIleValIleTyrValValGlnMetLeuSerArgLeuArgLys
         *         *      2100         *

GlyTyrArgProValPheSerSerProProGlyTyrIleGlnGln

IleHisIleHisLysAspArgGlyGlnProAlaAsnGluGluThr
         *         *         *      2200

GluGluAspGlyGlySerAsnGlyGlyAspArgTyrTrpProTrp
    *         *         *         *         *

ProIleAlaTyrIleHisPheLeuIleArgGlnLeuIleArgLeu
         *         *         *         *

LeuThrArgLeuTyrSerIleCysArgAspLeuLeuSerArgSer
 2300        *         *         *         *

PheLeuThrLeuGlnLeuIleTyrGlnAsnLeuArgAspTrpLeu
         *         *         *         *
```

```
    *       2400          *          *          *

GluAlaPheGlnAlaAlaAlaArgAlaThrArgGluThrLeuAla
          *          *          *          *

GlyAlaCysArgGlyLeuTrpArgValLeuGluArgIleGlyArg
    *          *       2500          *          *

GlyIleLeuAlaValProArgArgIleArgGlnGlyAlaGluIle
          *                     *          *          *

AlaLeuLeu.star..star..star.GlyThrAlaValSerAlaGlyArgLeuTyrGlu
    *          *          *       2600          *

TyrSerMetGluGlyProSerSerArgLysGlyGluLysPheVal
          *          *          *          *

GlnAlaThrLysTyrGly
    *          *
```

24. The immunogenic composition of claim 22 or of claim 23 which is dosed in antigen in order to enable the administration of a dosage-unit of 10 to 500, particularly from 50 to 100 µg/kg of bodyweight.

25. Monoclonal antibody characterized by its ability to specifically recognize one of the antigens according to anyone of claims 14 to 17.

26. The secreting hybridomas of the monoclonal antibody of claim 25.

27. Nucleic acids, optionally labelled, derived of part at least of RNA of HIV-2 virus or of one of its variance.

28. The nucleic acid of claim 27, which contains at least part of the cDNA which corresponds with the entire genomic RNA of HIV-2 retrovirus.

29. The nucleic acid of claim 27, which contains the nucleotide sequence:

GTGGAAGGCGAGACTGAAAGCAAGAGGAATACCATTTAGTTAAAGGACAG

GAACAGCTATACTTGGTCAGGGCAGGAAGTAACTAACAGAAACAGCTGAG

ACTGCAGGGACTTTCCAGAAGGGGCTGTAACCAAGGGAGGGACATGGGAG

GAGCTGGTGGGGAACGCCTCATATTCTCTGTATAATATACCCGCTGCTTG

CATTGTACTTCAGTCGCTCTGCGGAGAGGCTGGCAGATTGAGCCCTGGAG

GATCTCTCCAGCACTAGACGGATGAGCCTGGGTGCCCTGCTAGACTCTCA

CCAGCACTTGGCCGGTGCTGGCAGACGGCCCCACGCTTGCCTGCTTAAAA

ACCTTCCTTAATAAAGCTGCAGTAGAAGCA

30. The nucleic acid of claim 27, which contains a nucleotidic sequence coding for at least part of the aminoacid sequence indicated hereafter:

```
    GAGRODN
    MetGlyAlaArgAsnSerValLeuArgGlyLysLysAlaAspGlu
              *          *          *          *

    LeuGluArgIleArgLeuArgProGlyGlyLysLysLysTyrArg
        *          *          *          *          *

    LeuLysHisIleValTrpAlaAlaAsnTyrLeuAspArgPheGly
           100          *          *          *

    LeuAlaGluSerLeuLeuGluSerLysGluGlyCysGlnLysIle
        *          *          *          *          *

    LeuThrValLeuAspProMetValProThrGlySerGluAsnLeu
              *       200          *          *

    LysSerLeuPheAsnThrValCysValIleTrpCysIleHisAla
        *          *          *          *          *

    GluGluLysValLysAspThrGluGlyAlaLysGlnIleValArg
              *          *       300          *

    ArgHisLeuValAlaGluThrGlyThrAlaGluLysMetProSer
        *          *          *          *          *
```

```
          *         *         *        400

ProValGlnHisValGlyGlyAsnTyrThrHisIleProLeuSer
    *         *         *         *         *

ProArgThrLeuAsnAlaTrpValLysLeuValGluGluLysLys
         *         *         *         *

PheGlyAlaGluValValProGlyPheGlnAlaLeuSerGluGly
  500         *         *         *         *

CysThrProTyrAspIleAsnGlnMetLeuAsnCysValGlyAsp
         *         *         *         *

HisGlnAlaAlaMetGlnIleIleArgGluIleIleAsnGluGlu
    *       600         *         *         *

AlaAlaGluTrpAspValGlnHisProIleProGlyProLeuPro
    *         *       700         *         *

ThrSerThrValGluGluGluIleGluTrpMetPheArgProGlu

AsnProValProValGlyAsnIleTyrArgArgTrpIleGluIle
    *         *         *       800         *

GlyLeuGlnLysCysValArgMetTyrAsnProThrAsnIleLeu
         *         *         *         *

AspIleLysGlnGlyProLysGluProPheGlnSerTyrValAsp
    *         *         *         *       900

ArgPheTyrLysSerLeuArgAlaGluGlnThrAspProAlaVal
         *         *         *         *

LysAsnTrpMetThrGlnThrLeuLeuValGlnAsnAlaAsnPro
    *         *         *         *         *

AspCysLysLeuValLeuLysGlyLeuGlyMetAsnProThrLeu
      1000         *         *         *

GluGluMetLeuThrAlaCysGlnGlyValGlyGlyProGlyGln
    *         *         *         *         *

LysAlaArgLeuMetAlaGluAlaLeuLysGluValIleGlyPro
         *      1100         *         *

AlaProIleProPheAlaAlaAlaGlnGlnArgLysAlaPheLys
    *         *         *         *         *

CysTrpAsnCysGlyTyrGluGlyHisSerAlaArgGluCysArg
         *         *      1200         *

AlaProArgArgGlnGlyCysTrpLysCysGlyLysProGlyHis
    *         *         *         *         *

IleMetThrAsnCysProAspArgGlnAlaGlyPheLeuGlyLeu
         *         *         *      1300

GlyProTrpGlyLysLysProArgAsnPheProValAlaGlnVal
    *         *         *         *         *

ProGlnGlyLeuThrProThrAlaProProValAspProAlaVal
         *         *         *         *

AspLeuLeuGluLysTyrMetGlnGlnGlyLysArgGlnArgGlu
 1400         *         *         *         *

GlnArgGluArgProTyrLysGluValThrGluAspLeuLeuHis
         *         *         *         *

LeuGluGlnGlyGluThrProTyrArgGluProProThrGluAsp
    *      1500         *         *

LeuLeuHisLeuAsnSerLeuPheGlyLysAspGln
```

31. The nucleic acid of claim 27, which contains a nucleotidic sequence coding for at least part of the aminoacid sequence indicated hereafter:

```
                              ArgLysAlaPheLys

                                   *         *
```

```
        *         *      1200         *

AlaProArgArgGlnGlyCysTrpLysCysGlyLysProGlyHis

    *         *         *         *         *

IleMetThrAsnCysProAspArgGlnAlaGlyPheLeuGlyLeu

        *         *         *      1300

GlyProTrpGlyLysLysProArgAsnPheProValAlaGlnVal

    *         *         *         *         *

ProGlnGlyLeuThrProThrAlaProProValAspProAlaVal

        *         *         *         *

AspLeuLeuGluLysTyrMetGlnGlnGlyLysArgGlnArgGlu

 1400         *         *         *         *

GlnArgGluArgProTyrLysGluValThrGluAspLeuLeuHis

        *         *         *         *

LeuGluGlnGlyGluThrProTyrArgGluProProThrGluAsp

    *      1500         *         *

LeuLeuHisLeuAsnSerLeuPheGlyLysAspGln
```

32. The nucleic acid of claim 27, which contains a nucleotidic sequence coding for at least part of the aminoacid sequence indicated hereafter:

```
MetGlyAlaArgAsnSerValLeuArgGlyLysLysAlaAspGlu

        *         *         *         *

LeuGluArgIleArgLeuArgProGluGlyLysLysLysTyrArg

    *         *         *         *         *

LeuLysHisIleValTrpAlaAlaAsnLysLeuAspArgPheGly

       100         *         *         *

LeuAlaGluSerLeuLeuGluSerLysGluGlyCysGlnLysIle

    *         *         *         *         *

LeuThrValLeuAspProMetValProThrGlySerGluAsnLeu

        *       200         *         *

LysSerLeuPheAsnThrValCysValIleTrpCysIleHisAla

    *         *         *         *         *

GluGluLysValLysAspThrGluGlyAlaLysGlnIleValArg

        *         *       300         *

ArgHisLeuValAlaGluThrGlyThrAlaGluLysMetProSer

    *         *         *         *         *

ThrSerArgProThrAlaProSerSerGluLysGlyGlyAsnTyr

                              *    400
```

33. The nucleic acid of claim 27, which contains a nucleotidic sequence coding for at least part of the aminoacid sequence indicated hereafter:

```
ProValGlnHisValGlyGlyAsnTyrThrHisIleProLeuSer

    *         *         *         *         *

ProArgThrLeuAsnAlaTrpValLysLeuValGluGluLysLys

        *         *         *         *
```

PheGlyAlaGluValValProGlyPheGlnAlaLeuSerGluGly

500 * * * *

CysThrProTyrAspIleAsnGlnMetLeuAsnCysValGlyAsp

* * * *

HisGlnAlaAlaMetGlnIleIleArgGluIleIleAsnGluGlu

* 600 * * *

AlaAlaGluTrpAspValGlnHisProIleProGlyProLeuPro

* * * *

AlaGlyGlnLeuArgGluProArgGlySerAspIleAlaGlyThr

* * 700 * *

ThrSerThrValGluGluGlnlIeGlnTrpMetPheArgProGln

AspProValProValGlyAsnIleTyrArgArgTrpIleGlnIle

* * * 800 *

GlyLeuGlnLysCysValArgMetTyrAsnProThrAsnIleLeu

* * * *

AspIleLysGlnGlyProLysGluProPheGlnSerTyrValAsp

* * * * 900

ArgPheTyrLysSerLeuArgAlaGluGlnThrAspProAlaVal

* * * *

LysAsnTrpMetThrGlnThrLeuLeuValGlnAsnAlaAsnPro

* * * * *

AspCysLysLeuValLeuLysGlyLeuGlyMetAsnProThrLeu

1000 * * *

GluGluMetLeuThrAlaCysGlnGlyValGlyGlyProGlyGln

* * * * *

LysAlaArgLeuMetAlaGluAlaLeuLysGluValIleGlyPro

* 1100 *

AlaProIleProPheAlaAlaAlaGlnGln

34. The nucleic acid of claim 27, which contains a nucleotidic sequence coding for at least part of the aminoacid sequence indicated hereafter:

ENYRN
MetMetAsnGlnLeuLeuIleAlaIleLeuLeuAlaSerAlaCys

* * * *

LeuValTyrCysThrGlnTyrValThrValPheTyrGlyValPro

* * * * *

ThrTrpLysAsnAlaThrIleProLeuPheCysAlaThrArgAsn

100 * * *

ArgAspThrTrpGlyThrIleGlnCysLeuProAspAsnAspAsp

* * * * *

TyrGlnGluIleThrLeuAsnValThrGluAlaPheAspAlaTrp

* 200 * *

AsnAsnThrValThrGluGlnAlaIleGluAspValTrpHisLeu

```
PheGluThrSerIleLysProCysValLysLeuThrProLeuCys
        *         *       300         *
ValAlaMetLysCysSerSerThrGluSerSerThrGlyAsnAsn
    *         *         *         *         *
ThrThrSerLysSerThrSerThrThrThrThrThrProThrAsp
        *         *         *       400
GlnGluGlnGluIleSerGluAspThrProCysAlaArgAlaAsp
    *         *         *         *         *
AsnCysSerGlyLeuGlyGluGluGluThrIleAsnCysGlnPhe
        *         *         *         *
AsnMetThrGlyLeuGluArgAspLysLysLysGlnTyrAsnGlu
  500         *         *         *         *
ThrTrpTyrSerLysAspValValCysGluThrAsnAsnSerThr
    *       600         *         *         *
ThrGluSerCysAspLysHisTyrTrpAspAlaIleArgPheArg
        *         *         *         *
TyrCysAlaProProGlyTyrAlaLeuLeuArgCysAsnAspThr
    *         *       700         *         *
AsnTyrSerGlyPheAlaProAsnCysSerLysValValAlaSer
ThrCysThrArgMetMetGluThrGlnThrSerThrTrpPheGly
    *         *         *       800         *
PheAsnGlyThrArgAlaGluAsnArgThrTyrIleTyrTrpHis
        *         *         *         *
GlyArgAspAsnArgThrIleIleSerLeuAsnLysTyrTyrAsn
    *         *         *         *       900
LeuSerLeuHisCysLysArgProGlyAsnLysThrValLysGln
        *         *         *         *
IleMetLeuMetSerGlyHisValPheHisSerHisTyrGlnPro
    *         *         *         *         *
IleAsnLysArgProArgGlnAlaTrpCysTrpPheLysGlyLys
      1000        *         *         *
TrpLysAspAlaMetGlnGluValLysThrLeuAlaLysHisPro
    *         *         *         *         *
ArgTyrArgGlyThrAsnAspThrArgAsnIleSerPheAlaAla
        *      1100         *         *
ProGlyLysGlySerAspProGluValAlaTyrMetTrpThrAsn
    *         *         *         *         *
CysArgGlyGluPheLeuTyrCysAsnMetThrTrpPheLeuAsn
        *         *      1200         *
TrpIleGluAsnLysThrHisArgAsnTyrAlaProCysHisIle
    *         *         *         *         *
```

```
LysGlnIleIleAsnThrTrpHisLysValGlyArgAsnValTyr
        *         *         *      1300
LeuProProArgGluGlyGluLeuSerCysAsnSerThrValThr
    *         *         *         *         *
SerIleIleAlaAsnIleAspTrpGlnAsnAsrAsnGlnThrAsn
        *         *         *         *
IleThrPheSerAlaGluValAlaGluLeuTyrArgLeuGluLeu
 1400         *         *         *         *
GlyAspTyrLysLeuValGluIleThrProIleGlyPheAlaPro
ThrLysGluLysArgTyrSerSerAlaHisGlyArgHisThrArg
    *      1500         *         *         *
GlyValPheValLeuGlyPheLeuGlyPheLeuAlaThrAlaGly
        *         *         *         *
SerAlaMetGlyAlaArgAlaSerLeuThrValSerAlaGlnSer
    *         *      1600         *         *
ArgThrLeuLeuAlaGlyIleValGlnGlnGlnGlnGlnLeuLeu
        *         *         *         *
AspValValLysArgGlnGlnGluLeuLeuArgLeuThrValTrp
    *         *         *      1700         *
GlyThrLysAsnLeuGlnAlaArgValThrAlaIleGluLysTyr
                  *         *         *
LeuGlnAspGlnAlaArgLeuAsnSerTrpGlyCysAlaPheArg
    *         *         *         *      1800
GlnValCysHisThrThrValProTrpValAsnAspSerLeuAla
        *         *         *         *
ProAspTrpAspAsnMetThrTrpGlnGluTrpGluLysGlnVal
    *         *         *         *         *
ArgTyrLeuGluAlaAsnIleSerLysSerLeuGluGlnAlaGln
      1900         *         *         *
IleGlnGlnGluLysAsnMetTyrGluLeuGlnLysLeuAsnSer
    *         *         *         *         *
TrpAspIlePheGlyAsnAspPheAspLeuThrSerTrpValLys
        *      2000         *         *
TyrIleGlnTyrGlyValLeuIleIleValAlaValIleAlaLeu
    *         *         *         *         *
ArgIleValIleTyrValValGlnMetLeuSerArgLeuArgLys
        *         *      2100         *
GlyTyrArgProValPheSerSerProProGlyTyrIleGlnGln
IleHisIleHisLysAspArgGlyGlnProAlaAsnGluGluThr
        *         *         *      2200
GluGluAspGlyGlySerAsnGlyGlyAspArgTyrTrpProTrp
```

ProIleAlaTyrIleHisPheLeuIleArgGlnLeuLeuArgLeu

* * * *

LeuThrArgLeuTyrSerIleCysArgAspLeuLeuSerArgSer

2300 * * * *

PheLeuThrLeuGlnLeuIleTyrGlnAsnLeuArgAspTrpLeu

* * * *

ArgLeuArgThrAlaPheLeuGlnTyrGlyCysGluTrpIleGln

2400 * * *

GluAlaPheGlnAlaAlaAlaArgAlaThrArgGluThrLeuAla

* * * *

GlyAlaCysArgGlyLeuTrpArgValLeuGluArgIleGlyArg

* * 2500 * *

GlyIleLeuAlaValProArgArgIleArgGlnGlyAlaGlnIle

* * * *

AlaLeuLeu.star..star..star.GlyThrAlaValSerAlaGlyArgLeuTyrGlu

* * * 2600 *

TyrSerMetGluGlyProSerSerArgLysGlyGluLysPheVal

*

GlnAlaThrLysTyrGly

35. The nucleic acid of anyone of claims 28 to 34 which is formed a recombinant nucleic acid comprising a nucleic acid from a vector and in which said cDNA or part of said cDNA is inserted.

36. The recombinant nucleic acid of claim 35 which is labelled.

37. A process for the detection of HIV-2 retrovirus or of its RNA in a biological liquid or tissue, particularly for the in vitro diagnosis in man of the potentiality or existence of LAS or of AIDS, which comprises contacting nucleic acids contained in said biological liquid or tissue with a probe containing a nucleic acid according to anyone of claims 28 to 36 under stringent hybridization conditions for the time necessary for said hybridization to occur, washing the hybride formed with a solution ensuring the preservation of said stringent conditions, and detecting the hybride formed.

38. A process for the production of HIV-2 retrovirus which comprises culturing human T4 lymphocytes or permanent cell lines derived from said T4 lymphocytes and carrying the T4 phenotype, which lymphocytes or cell lines had previously been infected with an isolate of IV-2 virus and, particularly when the level of **reverse transcriptase** activity has reached a determined threhold, recovering and purifying the amounts of virus released in the culture medium of said lymphocytes or cell lines, particularly by differential centrifugation in a gradient of sucrose or metrizamide.

39. A process for the production of specific ntigen of HIV-2 retrovirus which comprises lysing, particularly by means of detergent such as SDS (for instane 0.1% SDS in a RIPA buffer) and recovering the lysate containing said antigens;

40. Process for the production of one of the above defined proteins (p12, p16 or p26) or of a protein having the structure of gp140 or of determined parts of said proteins, which process comprises inserting the corresponding nucleic acid sequence in a vector capable of transforming an appropriate host, enabling the expression of an insert containing in said vector, transforming said host by said vector which comprises the said nucleotidic sequence, culturing the transformed cell lines host, recovering and purifying the expressed protein.

41. Process for the production of a hybridization probe for the detection of the RNA of HIV-2 retrovirus which comprises a DNA sequence, particularly according to anyone of claims 27 to 35, in a cloning vector

competent cellular host, and recovering the DNA-recombinants obtained.

L3 ANSWER 3 OF 3 USPATFULL on STN
2000:31239 Methods for the preparation of human immunodeficiency virus type 2 (HIV-2) and antigens encoped thereby.
Montagnier, Luc, Le Plessis Robinson, France
Chamaret, Solange, Paris, France
Guetard, Denise, Paris, France
Alizon, Marc, Paris, France
Clavel, Fran.cedilla.ois, Paris, France
Guyader, Mireille, Paris, France
Sonigo, Pierre, Paris, France
Brun-Vezinet, Fran.cedilla.oise, Paris, France
Rey, Marianne, Paris, France
Rouzioux, Christine, Paris, France
Katlama, Christine, Paris, France
Institut Pasteur, France (non-U.S. corporation)
US 6037165 20000314
APPLICATION: US 1995-470487 19950606 (8)
PRIORITY: FR 1986-911 19860122
FR 1986-910 19860122
FR 1986-1635 19860206
FR 1986-1985 19860213
FR 1986-3881 19860318
FR 1986-4215 19860324
WO 1987-FR25 19870122
DOCUMENT TYPE: Utility; Granted.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CLM What is claimed is:
1. A method of producing HIV-2 retrovirus, wherein said method comprises culturing human CD4 lymphocytes in a culture medium, wherein said human CD4 lymphocytes have been infected with said HIV-2 retrovirus.

2. The method of claim 1, wherein, after said culturing step, said HIV-2 retrovirus is purified by recovering the supernatant of said culture medium.

3. The method of claim 2, wherein said virus is purified by differential centrifugation.

4. The method of claim 3, wherein said differential centrifugation occurs in a sucrose or metrizamide gradient.

5. The method of claim 2, wherein said recovering step occurs after the **reverse transcriptase** activity in said supernatant reaches 100,000 cpm/10^6 T lymphocytes.

6. A method of producing HIV-2 retrovirus, wherein said method comprises culturing immortalized human lymphocytes in a culture medium, wherein said lymphocytes bear CD4 receptors, and wherein said human CD4 lymphocytes have been infected with said HIV-2 retrovirus.

7. The method of claim 6, wherein, after said culturing step, said HIV-2 retrovirus is purified by recovering the supernatant of said culture medium.

8. The method of claim 7, wherein said virus is purified by differential centrifugation.

9. The method of claim 8, wherein said differential centrifugation occurs in a sucrose or metrizamide gradient.

10. The method of claim 7, wherein said recovering step occurs after the **reverse transcriptase** activity in said supernatant reaches 100,000 cpm/10^6 T lymphocytes.

11. A method for producing an HIV-2 retrovirus antigen, wherein said process comprises: a) lysing HIV-2 retrovirus with a detergent; b) recovering the resulting lysate; and c) isolating said antigen from said lysate, wherein said antigen is recognized by antibodies to HIV-2 and is not recognized by antibodies to HIV-1.

12. The method of claim 11, wherein said detergent comprises SDS.

13. The method of claim 12, wherein said detergent comprises 0.1% SDS in an RIPA buffer.

14. An immunogenic composition, comprising: a) a protein or glycoprotein of HIV-2 retrovirus; and b) a pharmaceutically acceptable vehicle.

15. The immunogenic composition of claim 14, wherein said protein or

gp36, and gp42.

16. The immunogenic composition of claim 15, wherein said p12 comprises the following amino acid sequence: Arg Lys Ala Phe Lys Cys Trp Asn Cys Gly Lys Glu

- Gly His Ser Ala Arg Gln Cys Arg Ala Pro Arg Arg
- Gln Gly Cys Trp Lys Cys Gly Lys Pro Gly His Ile
- Met Thr Asn Cys Pro Asp Arg Gln Ala Gly Phe Leu
- Gly Leu Gly Pro Trp Gly Lys Lys Pro Arg Asn Phe
- Pro Val Ala Gln Val Pro Gln Gly Leu Thr Pro Thr
- Ala Pro Pro Val Asp Pro Ala Val Asp Leu Leu Glu
- Lys Tyr Met Gln Gln Gly Lys Arg Gln Arg Glu Gln
- Arg Glu Arg Pro Tyr Lys Glu Val Thr Glu Asp Leu
- Leu His Leu Glu Gln Gly Glu Thr Pro Tyr Arg Glu
- Pro Pro Thr Glu Asp Leu Leu His Leu Asn Ser Leu
- Phe Gly Lys Asp Gln.

17. The immunogenic composition of claim 15, wherein said p16 comprises the following amino acid sequence: Met Gly Ala Arg Asn Ser Val Leu Arg Gly Lys Lys

- Ala Asp Glu Leu Glu Arg Ile Arg Leu Arg Pro Gly
- Gly Lys Lys Lys Tyr Arg Leu Lys His Ile Val Trp
- Ala Ala Asn Lys Leu Asp Arg Phe Gly Leu Ala Glu
- Ser Leu Leu Glu Ser Lys Glu Gly Cys Gln Lys Ile
- Leu Thr Val Leu Asp Pro Met Val Pro Thr Gly Ser
- Glu Asn Leu Lys Ser Leu Phe Asn Thr Val Cys Val
- Ile Trp Cys Ile His Ala Glu Glu Lys Val Lys Asp
- Thr Glu Gly Ala Lys Gln Ile Val Arg Arg His Leu
- Val Ala Glu Thr Gly Thr Ala Glu Lys Met Pro Ser
- Thr Ser Arg Pro Thr Ala Pro Ser Ser Glu Lys Gly
- Gly Asn Tyr.

18. The immunogenic composition of claim 15, wherein said p26 comprises the following amino acid sequence: Pro Val Gln His Val Gly Gly Asn Tyr Thr His Ile

- Pro Leu Ser Pro Arg Thr Leu Asn Ala Trp Val Lys
- Leu Val Glu Glu Lys Lys Phe Gly Ala Glu Val Val
- Pro Gly Phe Gln Ala Leu Ser Glu Gly Cys Thr Pro
- Tyr Asp Ile Asn Gln Met Leu Asn Cys Val Gly Asp
- His Gln Ala Ala Met Gln Ile Ile Arg Glu Ile Ile
- Asn Glu Glu Ala Ala Glu Trp Asp Val Gln His Pro
- Ile Pro Gly Pro Leu Pro Ala Gly Gln Leu Arg Glu
- Pro Arg Gly Ser Asp Ile Ala Gly Thr Thr Ser Thr
- Val Glu Glu Gln Ile Gln Trp Met Phe Arg Pro Gln
- Asn Pro Val Pro Val Gly Asn Ile Tyr Arg Arg Trp
- Ile Gln Ile Gly Leu Gln Lys Cys Val Arg Met Tyr
- Asn Pro Thr Asn Ile Leu Asp Ile Lys Gln Gly Pro
- Lys Glu Pro Phe Gln Ser Tyr Val Asp Arg Phe Tyr
- Lys Ser Leu Arg Ala Glu Gln Thr Asp Pro Ala Val
- Lys Asn Trp Met Thr Gln Thr Leu Leu Val Gln Asn
- Ala Asn Pro Asp Cys Lys Leu Val Leu Lys Gly Leu
- Gly Met Asn Pro Thr Leu Glu Glu Met Leu Thr Ala
- Cys Gln Gly Val Gly Gly Pro Gly Gln Lys Ala Arg
- Leu Met Ala Glu Ala Leu Lys Glu Val Ile Gly Pro
- Ala Pro Ile Pro Phe Ala Ala Ala Gln Gln.

19. The immunogenic composition of claim 15, wherein said p12 is encoded by the following nucleotide sequence:

```
                1160        1170        1180
1190
      AGAAA GGCATTTAAA TGCTGGAACT GTGGAAAGGA
  -       1200        1210        1220        1230
 AGGGCACTCG GCAAGACAAT GCCGAGCACC TAGAAGGCAG
  -       1240        1250        1260        1270
 GGCTGCTGGA AGTGTGGTAA GCCAGGACAC ATCATGACAA
  -       1280        1290        1300        1310
 ACTGCCCAGA TAGACAGGCA GGTTTTTTAG GACTGGGCCC
  -       1320        1330        1340        1350
 TTGGGGAAAG AAGCCCCGCA ACTTCCCCGT GGCCCAAGTT
  -       1360        1370        1380        1390
 CCGCAGGGGC TGACACCAAC AGCACCCCCA GTGGATCCAG
  -       1400        1410        1420        1430
 CAGTGGATCT ACTGGAGAAA TATATGCAGC AAGGGAAAAG
  -       1440        1450        1460        1470
 ACAGAGAGAG CAGAGAGAGA GACCATACAA GGAAGTGACA
  -       1480        1490        1500        1510
 GAGGACTTAC TGCACCTCGA GCAGGGGGAG ACACCATACA
  -       1520        1530        1540        1550
 GGGAGCCACC AACAGAGGAC TTGCTGCACC TCAATTCTCT
  -       1560
```

20. The immunogenic composition of claim 15, wherein said p16 is encoded by the following nucleotide sequence:

```
          10         20         30         40
ATGGGCGCGA GAAACTCCGT CTTGAGAGGG AAAAAAGCAG
 -         50         60         70         80
ATGAATTAGA AAGAATCAGG TTACGGCCCG GCGGAAAGAA
 -         90          100        110        120
AAAGTACAGG CTAAAACATA TTGTGTGGGC AGCGAATAAA
 -        130        140        150        160
TTGGACAGAT TCGGATTAGC AGAGAGCCTG TTGGAGTCAA
 -        170        180        190        200
AAGAGGGTTG TCAAAAAATT CTTACAGTTT TAGATCCAAT
 -        210        220        230        240
GGTACCGACA GGTTCAGAAA ATTTAAAAAG TCTTTTTAAT
 -        250        260        270        280
ACTGTCTGCG TCATTTGGTG CATACACGCA GAAGAGAAAG
 -        290        300        310        320
TGAAAGATAC TGAAGGAGCA AAACAAATAG TGCGGAGACA
 -        330        340        350        360
TCTAGTGGCA GAAACAGGAA CTGCAGAGAA AATGCCAAGC
 -        370        380        390        400
ACAAGTAGAC CAACAGCACC ATCTAGCGAG AAGGGAGGAA
 - ATTAC.
```

21. The immunogenic composition of claim 15, wherein said p26 is encoded by the following nucleotide sequence:

```
          410        420        430        440
      CCAGT GCAACATGTA GGCGGCAACT ACACCCATAT
 -        450        460        470        480
ACCGCTGAGT CCCCGAACCC TAAATGCCTG GGTAAAATTA
 -        490        500        510        520
GTAGAGGAAA AAAAGTTCGG GGCAGAAGTA GTGCCAGGAT
 -        530        540        550        560
TTCAGGCACT CTCAGAAGGC TGCACGCCCT ATGATATCAA
 -        570        580        590        600
CCAAATGCTT AATTGTGTGG GCGACCATCA AGCAGCCATG
 -        610        620        630        640
CAGATAATCA GGGAGATTAT CAATGAGGAA GCAGCAGAAT
 -        650        660        670        680
GGGATGTGCA ACATCCAATA CCAGGCCCCT TACCAGCGGG
 -        690        700        710        720
GCAGCTTAGA GAGCCAAGGG GATCTGACAT AGCAGGGACA
 -        730        740        750        760
ACAAGCACAG TAGAAGAACA GATCCAGTGG ATGTTTAGGC
 -        770        780        790        800
CACAAAATCC TGTACCAGTA GGAAACATCT ATAGAAGATG
 -        810        820        830        840
GATCCAGATA GGATTGCAGA AGTGTGTCAG GATGTACAAC
 -        850        860        870        880
CCGACCAACA TCCTAGACAT AAAACAGGGA CCAAAGGAGC
 -        890        900        910        920
CGTTCCAAAG CTATGTAGAT AGATTCTACA AAAGCTTGAG
 -        930        940        950        960
GGCAGAACAA ACAGATCCAG CAGTGAAGAA TTGGATGACC
 -        970        980        990       1000
CAAACACTGC TAGTACAAAA TGCCAACCCA GACTGTAAAT
 -       1010       1020       1030       1040
TAGTGCTAAA AGGACTAGGG ATGAACCCTA CCTTAGAAGA
 -       1050       1060       1070       1080
GATGCTGACC GCCTGTCAGG GGGTAGGTGG GCCAGGCCAG
 -       1090       1100       1110       1120
AAAGCTAGAT TAATGGCAGA GGCCCTGAAA GAGGTCATAG
 -       1130       1140       1150
GACCTGCCCC TATCCCATTC GCAGCAGCCC
 - AGCAG.
```

22. The immunogenic composition of claim 15, wherein said immunogenic administered in dosages containing from 50 to 100 micrograms of said protein per kilogram of body weight.

```
=> s (HIV or human immunodeficiency virus or huma t cell leukemia virus or human t cell lymphotropic virus or ARV or HT
     48201 HIV
    549525 HUMAN
     27142 IMMUNODEFICIENCY
    111925 VIRUS
     19329 HUMAN IMMUNODEFICIENCY VIRUS
```

```
          372 HUMA
      1215249 T
       663132 CELL
        45042 LEUKEMIA
       111925 VIRUS
            0 HUMA T CELL LEUKEMIA VIRUS
                (HUMA(W)T(W)CELL(W)LEUKEMIA(W)VIRUS)
       549525 HUMAN
      1215249 T
       663132 CELL
         2027 LYMPHOTROPIC
       111925 VIRUS
          714 HUMAN T CELL LYMPHOTROPIC VIRUS
                (HUMAN(W)T(W)CELL(W)LYMPHOTROPIC(W)VIRUS)
          992 ARV
         7980 HTLV
       715114 III
         2223 HTLV-III
                (HTLV(W)III)
       188035 AIDS
      1924904 RELATED
       111925 VIRUS
          233 AIDS RELATED VIRUS
                (AIDS(W)RELATED(W)VIRUS)
       188035 AIDS
      1844318 ASSOCIATED
        25068 RETROVIRUS
          174 AIDS ASSOCIATED RETROVIRUS
                (AIDS(W)ASSOCIATED(W)RETROVIRUS)
         2250 LAV
         2253 LYMPHADENOPATHY
      1844318 ASSOCIATED
       111925 VIRUS
          524 LYMPHADENOPATHY ASSOCIATED VIRUS
                (LYMPHADENOPATHY(W)ASSOCIATED(W)VIRUS)
L4      51731 (HIV OR HUMAN IMMUNODEFICIENCY VIRUS OR HUMA T CELL LEUKEMIA
              VIRUS OR HUMAN T CELL LYMPHOTROPIC VIRUS OR ARV OR HTLV-III OR
              AIDS RELATED VIRUS OR AIDS ASSOCIATED RETROVIRUS OR LAV OR LYMPHA
              DENOPATHY ASSOCIATED VIRUS)

=> s l4 and endogenous
       77865 ENDOGENOUS
L5     21167 L4 AND ENDOGENOUS

=> s l5 and (reverse transcriptase)
      585265 REVERSE
       35689 TRANSCRIPTASE
       35431 REVERSE TRANSCRIPTASE
                (REVERSE(W)TRANSCRIPTASE)
L6      7604 L5 AND (REVERSE TRANSCRIPTASE)

=> s l6 and endogenous/clm
        5200 ENDOGENOUS/CLM
L7       383 L6 AND ENDOGENOUS/CLM

=> s l7 and (reverse transcriptase/clm or RT/clm)
       70832 REVERSE/CLM
        2247 TRANSCRIPTASE/CLM
        2230 REVERSE TRANSCRIPTASE/CLM
               ((REVERSE(W)TRANSCRIPTASE)/CLM)
        2021 RT/CLM
L8        41 L7 AND (REVERSE TRANSCRIPTASE/CLM OR RT/CLM)

=> s l8 and ay<1986
     1145013 AY<1986
L9         0 L8 AND AY<1986

=> s l8 and ay<1990
     1522415 AY<1990
L10        1 L8 AND AY<1990

=> d l10,cbib

L10  ANSWER 1 OF 1  USPATFULL on STN
90:50628 Method of treating retrovirus infection.
    Venkateswaran, Pinayur S., Chester, PA, United States
    Millman, Irving, Willow Grove, PA, United States
    Blumberg, Baruch S., Philadelphia, PA, United States
    Fox Chase Cancer Center, Philadelphia, PA, United States (U.S. corporation)
    US 4937074 19900626
    APPLICATION: US 1988-174695  19880329 (7)
    DOCUMENT TYPE: Utility; Granted.
```

```
=> s l8 and ay<1995
       2115319 AY<1995
L11           5 L8 AND AY<1995

=> d l11,cbib,1-5

L11  ANSWER 1 OF 5  USPATFULL on STN
2002:340247 Methods and compositions for cDNA synthesis.
    Miller, Jeffrey E., 10828 Red Rock Dr., Scripps Ranch, CA, United States
    92131
    US 6498025 B1 20021224
    APPLICATION: US 1994-227476  19940414 (8)
    DOCUMENT TYPE: Utility; GRANTED.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11  ANSWER 2 OF 5  USPATFULL on STN
2001:121230 Direct and biochemically functional detection process of retrovirus
    in biological samples.
    Faff, Ortwin, Unterschleissheim, Germany, Federal Republic of
    Retro-Tech GmbH, Unterschleissheim, Germany, Federal Republic of (non-U.S.
    corporation)
    US 6268123 B1 20010731
    WO 9428115  19941208
    APPLICATION: US 1996-557108  19960228 (8)
    WO 1994-DE610 19940531 19960228  PCT 371 date 19960228  PCT 102(e) date
    PRIORITY: DE 1993-4318229' 19930601
    DE 1994-4416300  19940509
    DOCUMENT TYPE: Utility; GRANTED.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11  ANSWER 3 OF 5  USPATFULL on STN
97:68351 Nucleic acid preparation methods.
    Lin, Lily, Berkeley, CA, United States
    HRI Research, Inc., Concord, CA, United States (U.S. corporation)
    US 5654179 19970805
    APPLICATION: US 1994-317220  19941003 (8)
    DOCUMENT TYPE: Utility; Granted.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11  ANSWER 4 OF 5  USPATFULL on STN
97:31574 Nucleic acid preparation methods.
    Lin, Lily, Berkeley, CA, United States
    Cimino, George, Richmond, CA, United States
    Zhu, Yu S., Richmond, CA, United States
    HRI Research, Inc., Concord, CA, United States (U.S. corporation)
    US 5620852 19970415
    APPLICATION: US 1994-332616  19941031 (8)
    DOCUMENT TYPE: Utility; Granted.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11  ANSWER 5 OF 5  USPATFULL on STN
90:50628 Method of treating retrovirus infection.
    Venkateswaran, Pinayur S., Chester, PA, United States
    Millman, Irving, Willow Grove, PA, United States
    Blumberg, Baruch S., Philadelphia, PA, United States
    Fox Chase Cancer Center, Philadelphia, PA, United States (U.S. corporation)
    US 4937074 19900626
    APPLICATION: US 1988-174695  19880329 (7)
    DOCUMENT TYPE: Utility; Granted.


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ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
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=> d his

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     FILE 'USPATFULL' ENTERED AT 12:53:41 ON 21 MAR 2007
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L1            58 S E3
L2             0 S L1 AND (ENDOGENOUS/CLM)
L3             3 S L1 AND (REVERSE TRANSCRIPTASE/CLM OR RT/CLM)
L4         51731 S (HIV OR HUMAN IMMUNODEFICIENCY VIRUS OR HUMA T CELL LEUKEMIA
L5         21167 S L4 AND ENDOGENOUS
L6          7604 S L5 AND (REVERSE TRANSCRIPTASE)
L7           383 S L6 AND ENDOGENOUS/CLM
L8            41 S L7 AND (REVERSE TRANSCRIPTASE/CLM OR RT/CLM)
L9             0 S L8 AND AY<1986
L10            1 S L8 AND AY<1990
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COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                              23.76      23.97

FILE 'WPIDS' ENTERED AT 12:58:44 ON 21 MAR 2007
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    2006. No update date (UP) has been created for the reclassified
    documents, but they can be identified by 20060101/UPIC and
    20061231/UPIC. <<<

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http://scientific.thomson.com/support/patents/coverage/latestupdates/

PLEASE BE AWARE OF THE NEW IPC REFORM IN 2006, SEE
http://www.stn-international.de/stndatabases/details/ipc_reform.html and
http://scientific.thomson.com/media/scpdf/ipcrdwpi.pdf

>>> FOR DETAILS ON THE NEW AND ENHANCED DERWENT WORLD PATENTS INDEX
    PLEASE SEE
http://www.stn-international.de/stndatabases/details/dwpi_r.html <<<

=> e alizon marc/in
E1            2     ALIZON J/IN
E2           22     ALIZON M/IN
E3            0 --> ALIZON MARC/IN
E4            1     ALJ/IN
E5            1     ALJ T/IN
E6            3     ALJABARI/IN
E7            3     ALJABARI S/IN
E8            1     ALJABJEV/IN
E9            1     ALJABJEV I A/IN
E10           1     ALJADAFF/IN
E11           1     ALJADAFF D/IN
E12           9     ALJADEFF/IN

=> s e2
L12          22 "ALIZON M"/IN

=> s l12 and endogenous
          8957 ENDOGENOUS
L13          1 L12 AND ENDOGENOUS

=> d l13,bib,ab

L13  ANSWER 1 OF 1  WPIDS COPYRIGHT 2007       THE THOMSON CORP on STN
Full Text
AN   2000-328365 [28]   WPIDS
CR   1987-221261; 1987-329355; 1988-149264; 1988-220290; 1988-272808;
     1992-041067; 2002-434814; 2003-553960; 2004-070575
DNC  C2000-099464 [28]
TI   Novel cloned nucleotide sequences homologous or identical to the portion
     of genomic RNA of HIV-2 viruses useful as probes and in diagnostic tests
     to diagnose HIV-2 infection
DC   B04; D16
IN   ALIZON M; CLAVEL F; GEUTARD D; GUYADER M; MONTAGNIER L; SONIGO P
PA   (INSP-C) INST PASTEUR
CYC  1
PIA  US 6054565      A  20000425 (200028)* EN  33[5]
ADT  US 6054565 A CIP of US 1986-835228 19860303; US 6054565 A CIP of US
     1986-916080 19861006; US 6054565 A CIP of US 1986-933184 19861121; US
     6054565 A CIP of US 1987-3764 19870116; US 6054565 A Div Ex US 1987-13477
     19870211; US 6054565 A Div Ex US 1991-752368 19910903; US 6054565 A Div Ex
```

FDT US 6054565 A CIP of US 4839288 A; US 6054565 A CIP of US 5051496 A; US 6054565 A Div ex US 5079342 A
PRAI US 1994-234875 19940428
US 1986-835228 19860303
US 1986-916080 19861006
US 1986-933184 19861121
US 1987-3764 19870116
US 1987-13477 19870211
US 1991-752368 19910903
US 1991-810908 19911220
AB US 6054565 A UPAB: 20050411
NOVELTY - A cloned nucleic acid (I) of a human immunodeficiency virus type 2 (HIV-2), in which the nucleic acid is isolated from other human immunodeficiency viral nucleic acids having a fully defined sequence of 9670 nucleotides as given in the specification, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the isolated and purified DNA fragment encoding one or more amino acid sequences as given in the specification.

ACTIVITY - None given.

MECHANISM OF ACTION - None given.

USE - (I) is capable of being used as probes in diagnostic method to obtain the immunological reagents necessary to diagnose an HIV-2 infection. These sequences may be used as probes in hybridization reactions with the genetic material of infected patients to indicate whether the RNA of the HIV-2 virus is present in these patient's lymphocytes or whether an analogous DNA is present. The genetic sequence of the HIV-2 virus may be used to create the polypeptides encoded by these sequences. Specifically, these polypeptides may be created by expression of the cDNA obtained from bacterial, yeast or animal cells. These polypeptides may be used in diagnostic tests such as immunofluorescence assays, radioimmunoassays (RIA) and Western Blot tests. Monoclonal antibodies to these polypeptides of fragments may be created and used in immunodiagnostic tests. The polypeptides of the present invention may also be used as immunogenic reagents to induce protection against infection by HIV-2 viruses. The polypeptides produced by recombinant-DNA techniques would function as vaccine agents. The polypeptides may be used on competitive assays to test the ability of various antiviral agents to determined their ability to prevent the virus from fixing on its target.

DESCRIPTION OF DRAWINGS - The figure shows the position of derived plasmids from lambdaROD27, lambdaROD35 and lambdaROD4.

=> s (HIV or human immunodeficiency virus or HTLV-III or human t cell leukemia virus or human t cell lymphotropic virus
24131 HIV
206745 HUMAN
8519 IMMUNODEFICIENCY
49237 VIRUS
5313 HUMAN IMMUNODEFICIENCY VIRUS
(HUMAN(W)IMMUNODEFICIENCY(W)VIRUS)
1378 HTLV
387943 III
233 HTLV-III
(HTLV(W)III)
206745 HUMAN
403827 T
447461 CELL
10562 LEUKEMIA
49237 VIRUS
154 HUMAN T CELL LEUKEMIA VIRUS
(HUMAN(W)T(W)CELL(W)LEUKEMIA(W)VIRUS)
206745 HUMAN
403827 T
447461 CELL
332 LYMPHOTROPIC
49237 VIRUS
116 HUMAN T CELL LYMPHOTROPIC VIRUS
(HUMAN(W)T(W)CELL(W)LYMPHOTROPIC(W)VIRUS)
45 ARV
31906 AIDS
226687 RELATED
49237 VIRUS
15 AIDS RELATED VIRUS
(AIDS(W)RELATED(W)VIRUS)
31906 AIDS
343473 ASSOCIATED
3372 RETROVIRUS
16 AIDS ASSOCIATED RETROVIRUS
(AIDS(W)ASSOCIATED(W)RETROVIRUS)
159 LAV
255 LYMPHADENOPATHY
343473 ASSOCIATED
49237 VIRUS

```
                (LYMPHADENOPATHY(W)ASSOCIATED(W)VIRUS)
L14       25239 (HIV OR HUMAN IMMUNODEFICIENCY VIRUS OR HTLV-III OR HUMAN T
                CELL LEUKEMIA VIRUS OR HUMAN T CELL LYMPHOTROPIC VIRUS OR ARV
                OR AIDS RELATED VIRUS OR AIDS ASSOCIATED RETROVIRUS OR LAV OR
                LYMPHADENOPATHY ASSOCIATED VIRUS)

=> s l14 and endogenous
          8957 ENDOGENOUS
L15        590 L14 AND ENDOGENOUS

=> s l15 and (RT or reverse transcriptase)
          8620 RT
        194242 REVERSE
          5128 TRANSCRIPTASE
          5039 REVERSE TRANSCRIPTASE
                (REVERSE(W)TRANSCRIPTASE)
L16         48 L15 AND (RT OR REVERSE TRANSCRIPTASE)

=> s l16 and py<1990
       4634119 PY<1990
                (PY<1990)
L17          2 L16 AND PY<1990

=> d l17,bib,ab,1-2

L17  ANSWER 1 OF 2  WPIDS COPYRIGHT 2007       THE THOMSON CORP on STN
Full Text
AN   1992-113927 [14]   WPIDS
CR   1988-071154; 1988-294673; 1990-099161; 1990-099162
DNC  C1988-130570; C1992-053055 [21] [16]
TI   Nucleoside prodrugs for antiviral (e.g. HIV) or anticancer activity -
     can penetrate CNS and are hydrolysed by amino:hydrolase to active cpd.
DC   B02; B03; D16
IN   BARCHI J J; DRISCOLL J S; FORD H; JOHNS D G; KELLEY J A; MARQUEZ V E;
     MITSUYA H; TOMASZEWSKI J E; TSENG C K; TSENG C K H
PA   (USSH-C) US DEPT HEALTH & HUMAN SERVICE; (USSH-C) US DEPT HEALTH & HUMAN
     SERVICES; (USDC-C) US DEPT OF COMMERCE; (USDC-C) US SEC OF COMMERCE
CYC  12
PIA  US 683432       A0 19920218 (199214)* EN  69[4]
     EP 287313       A  19881019 (198842)  EN  10[3]
     EP 287313       B1 19950104 (199506)  EN  14
     DE 3852665      G  19950216 (199512)  DE
     US 5459256      A  19951017 (199547)  EN
     US 5495010      A  19960227 (199614)  EN  8
     US 5565437      A  19961015 (199647)  EN  8
     CA 1340645      C  19990713 (199947)  EN
ADT  US 683432 A0 US 1987-39402 19870417; US 683432 A0 US 1988-288652 19881212;
     US 683432 A0 US 1989-313056 19890216; US 683432 A0 US 1991-683432
     19910410; US 5459256 A CIP of US 1987-39402 19870417; US 5495010 A CIP of
     US 1987-39402 19870417; US 5565437 A CIP of US 1987-39402 19870417; CA
     1340645 C CA 1988-563370 19880406; DE 3852665 G DE 1988-3852665 19880412;
     EP 287313 A EP 1988-303248 19880412; EP 287313 B1 EP 1988-303248 19880412;
     DE 3852665 G EP 1988-303248 19880412; US 5459256 A CIP of US 1988-288652
     19881212; US 5495010 A Cont of US 1988-288652 19881212; US 5565437 A Cont
     of US 1988-288652 19881212; US 5459256 A CIP of US 1989-313056 19890216;
     US 5459256 A US 1991-683432 19910410; US 5495010 A US 1991-762082
     19910919; US 5565437 A Cont of US 1991-762082 19910919; US 5565437 A US
     1992-62520 19921110
FDT  DE 3852665 G Based on EP 287313 A; US 5565437 A Cont of US 5495010 A
PRAI US 1991-683432 19910410
     US 1987-39402 19870417
     US 1988-288652 19881212
     US 1989-313056 19890216
     US 1991-762082 19910919
     US 1992-62520 19921110
AB   US 7683432 N   UPAB: 20060107
     Nucleosides and nucleotides of formulae (I) - (VIII) are new. In (I) -
     (VIII) A = H or F; B = H, mono-, di-, or triphosphate, opt. with counter
     ion alkali metal or NH4 ions; Y = H, NH2, or halogen; X = NHR, NR2, NROR,
     halogen, SR, or OR1; R = H, 1-16C alkyl, or Ar1-8C alkyl; R1 = as R but
     not H; Ar = phenyl (opt. substd. by 1-8C alkyl or OH; provided that, when
     A = H, then X is not halogen; G = O or CH2; Z = H, OH, or CH2OH; J = H,
     1-6C alkyl, or halogen; R2 = H, OH, 1-6C alkoxy, 1-16C alkyl, or Ar1-5C
     alkyl; and Q = halogen or CH = CHBr.
           USE - (I) - (VIII) are lipopholic antiviral and anticancer prodrugs
     activated by endogenous aminohydrolase enzymes. They have diffusion
     properties appropriate for CNS penetration. Once converted to active cpds.
     by the enzyme, they inhibit retrovirus reverse transcriptase and viral
     DNA polymerase after herpes induced thymidine kinase activation or
     incorporation into cancer cell DNA. Depending on the hydrolase prods.,
     e.g. AZT, acyclovir, DHPG, oxetanocin, HPMPA, PMEA or IUDR, uses, e.g.
     anti-HIV for AIDS, anti-herpes, or cancer therapy, and doses are as
```

blood-brain barrier. - = O

L17 ANSWER 2 OF 2 WPIDS COPYRIGHT 2007 THE THOMSON CORP on STN
Full Text
AN 1989-309378 [42] WPIDS
DNC C1989-136952 [21]
TI Treating retro-virus infection - by administering component of Phyllanthus niruri having **endogenous reverse transcriptase** inhibitory activity
DC B04
IN BLUMBERG B S; MILLMAN I; VENKATESWA P; VENKATESWARAN P S
PA (FOXC-N) FOX CHASE CANCER CENT
CYC 17

PIA	**WO 8909059**	**A**	**19891005 (198942)***	**EN**	**23**
	AU 8934133	**A**	**19891016 (199008)**	**EN**	
	ZA 8902308	A	19900228 (199013)	EN	
	US 4937074	A	19900626 (199028)	EN	
	CN 1037903	**A**	**19891213 (199038)**	**ZH**	
	EP 407452	A	19910116 (199103)	EN	
	DK 9002345	A	19900928 (199106)	DA	
	JP 03505325	W	19911121 (199202)	JA	
	EP 407452	B1	19930825 (199334)	EN	11[4]
	DE 68908701	E	19930930 (199340)	DE	
	IL 89793	A	19940227 (199419)	EN	

ADT WO 8909059 A WO 1989-US1270 19890328; US 4937074 A US 1988-174695 19880329; DE 68908701 E DE 1989-68908701 19890328; EP 407452 A EP 1989-904470 19890328; EP 407452 B1 EP 1989-904470 19890328; DE 68908701 E EP 1989-904470 19890328; JP 03505325 W JP 1989-504343 19890328; EP 407452 B1 WO 1989-US1270 19890328; DE 68908701 E WO 1989-US1270 19890328; IL 89793 A IL 1989-89793 19890329; ZA 8902308 A ZA 1989-2308 19890329
FDT DE 68908701 E Based on EP 407452 A; EP 407452 B1 Based on WO 8909059 A; DE 68908701 E Based on WO 8909059 A
PRAI US 1988-174695 19880329
AB WO 1989009059 A UPAB: 20060106
A method for treating patients having a retrovirus infection comprises administering a component of Phyllanthus niruri (PN) having **endogenous reverse transcriptase** inhibitory activity.

USE/ADVANTAGE - The P.N. extract described in US4,673,575 for treating chronic hepatitis virus infection has been found to be effective in treating retrovirus infection, e.g., Rous Sarcoma virus, Moloney murine leukemia virus, HTLVI, HTLVII, **HIV**-I and **HIV**-II.

```
=> file medline
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                                58.32      82.29

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 FILE LAST UPDATED: 17 Mar 2007 (20070317/UP).  FILE COVERS 1950 TO DATE.

  All regular MEDLINE updates from November 15 to December 16 have been
  added to MEDLINE, along with 2007 Medical Subject Headings (MeSH(R))
  and 2007 tree numbers.

  The annual reload will be available in early 2007.

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.

=> e alizon marc/au
E1            8     ALIZON J/AU
E2           66     ALIZON M/AU
E3            6 --> ALIZON MARC/AU
E4            1     ALIZON P/AU
E5            1     ALIZON SAMUEL/AU
E6            1     ALIZOV P A/AU
E7            1     ALIZZI A M/AU
E8            4     ALIZZI ALI M/AU
E9            1     ALIZZI SILVIA/AU
E10           1     ALJ A E/AU
E11           1     ALJ A S/AU
E12           1     ALJ Y/AU

=> s e2 or e3
             66 "ALIZON M"/AU
              6 "ALIZON MARC"/AU
L18          72 "ALIZON M"/AU OR "ALIZON MARC"/AU

=> s l18 and (endogenous)
         144297 ENDOGENOUS
```

```
=> s (HIV or human immunodeficiency virus or HTLV-III or human t cell lymphotropic virus or human t cell leukemia virus
       168526 HIV
      1470362 HUMAN
       126886 IMMUNODEFICIENCY
       428105 VIRUS
        50549 HUMAN IMMUNODEFICIENCY VIRUS
                (HUMAN(W)IMMUNODEFICIENCY(W)VIRUS)
        10521 HTLV
       255913 III
         1644 HTLV-III
                (HTLV(W)III)
      1470362 HUMAN
       559754 T
      2105300 CELL
         7228 LYMPHOTROPIC
       428105 VIRUS
         1507 HUMAN T CELL LYMPHOTROPIC VIRUS
                (HUMAN(W)T(W)CELL(W)LYMPHOTROPIC(W)VIRUS)
      1470362 HUMAN
       559754 T
      2105300 CELL
       191536 LEUKEMIA
       428105 VIRUS
         2303 HUMAN T CELL LEUKEMIA VIRUS
                (HUMAN(W)T(W)CELL(W)LEUKEMIA(W)VIRUS)
          624 ARV
       116600 AIDS
       985955 RELATED
       428105 VIRUS
           12 AIDS RELATED VIRUS
                (AIDS(W)RELATED(W)VIRUS)
       116600 AIDS
      1278404 ASSOCIATED
        10692 RETROVIRUS
           53 AIDS ASSOCIATED RETROVIRUS
                (AIDS(W)ASSOCIATED(W)RETROVIRUS)
         1122 LAV
        11562 LYMPHADENOPATHY
      1278404 ASSOCIATED
       428105 VIRUS
          295 LYMPHADENOPATHY ASSOCIATED VIRUS
                (LYMPHADENOPATHY(W)ASSOCIATED(W)VIRUS)
L20     178378 (HIV OR HUMAN IMMUNODEFICIENCY VIRUS OR HTLV-III OR HUMAN T
               CELL LYMPHOTROPIC VIRUS OR HUMAN T CELL LEUKEMIA VIRUS OR ARV
               OR AIDS RELATED VIRUS OR AIDS ASSOCIATED RETROVIRUS OR LAV OR
               LYMPHADENOPATHY ASSOCIATED VIRUS)

=> s 120 and endogenous
       144297 ENDOGENOUS
L21      1240 L20 AND ENDOGENOUS

=> s 121 and (RT or reverse transcriptase)
       182244 RT
       168256 REVERSE
        90952 TRANSCRIPTASE
        90596 REVERSE TRANSCRIPTASE
                (REVERSE(W)TRANSCRIPTASE)
L22       203 L21 AND (RT OR REVERSE TRANSCRIPTASE)

=> s 122 and py<1988
      7524549 PY<1988
                (PY<19880000)
L23         1 L22 AND PY<1988

=> d 123,cbib,ab

L23  ANSWER 1 OF 1     MEDLINE on STN
84231330.    PubMed ID: 6203528.   Characterization of the RNA dependent DNA
     polymerase of a new humán T-lymphotropic retrovirus (lymphadenopathy
     associated virus). Rey M A; Spire B; Dormont D; Barre-Sinoussi F;
     Montagnier L; Chermann J C. Biochemical and biophysical research
     communications, (1984 May 31) Vol. 121, No. 1, pp. 126-33. Journal
     code: 0372516. ISSN: 0006-291X. Pub. country: United States. Language:
     English.
AB   We described here the characteristics of the Reverse Transcriptase
     activity associated with the Lymphadenopathy Associated Virus (
     LAV ). A critical concentration of non ionic detergent, all four
     deoxyribonucleosides triphosphates and the divalent cation Mg2+ are
     required for optimal endogenous enzyme activity. The endogenous
     reaction product is digested by DNase and not by RNase and its synthesis
     is only slightly inhibited by actinomycin D. Exogenous reactions are
```

primer and Mg2+ as divalent cation. This enzyme can be distinguished from other cellular DNA polymerases activities and from Terminal deoxynucleotidyl Transferase (TdT) by purification from **LAV** infected T lymphocytes using phosphocellulose column.

```
=> d his

     (FILE 'HOME' ENTERED AT 12:53:27 ON 21 MAR 2007)

     FILE 'USPATFULL' ENTERED AT 12:53:41 ON 21 MAR 2007
                E ALIZON MARC/IN
L1             58 S E3
L2              0 S L1 AND (ENDOGENOUS/CLM)
L3              3 S L1 AND (REVERSE TRANSCRIPTASE/CLM OR RT/CLM)
L4          51731 S (HIV OR HUMAN IMMUNODEFICIENCY VIRUS OR HUMA T CELL LEUKEMIA
L5          21167 S L4 AND ENDOGENOUS
L6           7604 S L5 AND (REVERSE TRANSCRIPTASE)
L7            383 S L6 AND ENDOGENOUS/CLM
L8             41 S L7 AND (REVERSE TRANSCRIPTASE/CLM OR RT/CLM)
L9              0 S L8 AND AY<1986
L10             1 S L8 AND AY<1990
L11             5 S L8 AND AY<1995

     FILE 'WPIDS' ENTERED AT 12:58:44 ON 21 MAR 2007
                E ALIZON MARC/IN
L12            22 S E2
L13             1 S L12 AND ENDOGENOUS
L14         25239 S (HIV OR HUMAN IMMUNODEFICIENCY VIRUS OR HTLV-III OR HUMAN T C
L15           590 S L14 AND ENDOGENOUS
L16            48 S L15 AND (RT OR REVERSE TRANSCRIPTASE)
L17             2 S L16 AND PY<1990

     FILE 'MEDLINE' ENTERED AT 13:04:28 ON 21 MAR 2007
                E ALIZON MARC/AU
L18            72 S E2 OR E3
L19             0 S L18 AND (ENDOGENOUS)
L20        178378 S (HIV OR HUMAN IMMUNODEFICIENCY VIRUS OR HTLV-III OR HUMAN T C
L21          1240 S L20 AND ENDOGENOUS
L22           203 S L21 AND (RT OR REVERSE TRANSCRIPTASE)
L23             1 S L22 AND PY<1988

=> log off
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